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RAM BAGH, PATIALA

THE MOTHERLAND
AND THE EMPIRE

To
The Children of the Flag

OUR LITTLE FRIENDS IN THE BRITISH EMPIRE



One of the most picturesque groups in the world, if they could be brought together, would be a group of children representing all the races in the British Empire. A wonderful gathering it would be, speaking hundreds of languages, and wearing costumes of every kind and colour.



THE MOTHERLAND AND THE EMPIRE

ROUND THE WORLD WITH THE FLAG

Being Volume 3 of
THE CHILDREN'S TREASURE-HOUSE

A Companion to the Children's Encyclopedia

Edited by Arthur Mee

Editor of the Children's Newspaper

The whole work comprising the following 12 volumes

1. IMMORTAL HEROES OF THE WORLD
Some of the greatest people who have ever lived
2. NATURE IN ALL HER GLORY
The book of the changing year
3. THE MOTHERLAND AND THE EMPIRE
Round the world with the flag
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WHO THE BRITISH PEOPLE ARE

THOUGH the world is divided into nations, and though each nation is regarded as being one people under one name, as Englishmen, Frenchmen, or Belgians, the people of almost every country are of mixed origin. The men of one part of a country differ widely from the men of another part, in features and character, because long ago their forefathers were born of a different stock. The Englishman of Dorset is unlike the Englishman of Northumberland; the Frenchman of Brittany is unlike the Frenchman of Burgundy; the Italian of the Plain of Piedmont, screened by the Alps, is unlike the Italian of Southern Italy. In no country have the people so completely mixed as to form one similar stock or type everywhere.

The most remarkable of all modern examples of the welding of many peoples into one nation can be seen in the United States of America. Those States are always receiving inhabitants from every European country, and slowly, after a few generations of intermarriage, and of life in America, all—be they Englishmen, Germans, Italians, Norwegians, Bulgarians, or any other nationality—are changed into Americans. What is now being done in America before our eyes has been done more slowly through many centuries in every country of Europe.

The modern Englishman has been built up from many peoples, each of whom has added something of value to the stock. The Englishman is what he is because he is a compound man, welded out of a wide variety of human material through the long course of his country's history.

In the earliest times to which our knowledge of men extends, long before written history, men of the most primitive kind lived in Britain. Before it was an island they came by land from what is now called Europe, along

tracts that are now under the sea. They were a hardy race of hunters, who used stone weapons against animals now extinct. From time to time parts of their skeletons are unearthed, and we know from the shape of their skulls that they must have been less clever and civilised than the early inhabitants of Britain of whom we can read in the first records of life in our island.

What became of these earliest men of Britain, who have left us only a few bones and rude weapons, and to whom we cannot even give a distinctive name? When, in the Bronze Age and the Early Iron Age, tribes of more civilised people, of Celtic origin, now generally known as Britons, crossed over from the Continent, which had been separated from Britain by the sinking of the beds of the North Sea and the Channel, the first inhabitants would fall back before the invaders into the mountain wilds that were difficult to reach, and they would be absorbed gradually into the conquering population from these remoter parts, or, if they were numerous, they might even absorb the invaders. This process of absorption was probably helped by the fact that there were two invasions, with a considerable interval of time between, by large bodies of people speaking Celtic languages.

First, a mass of people whose tongue was what we now call Gaelic, and who may be themselves called Gaels, swept over the country, and occupied it, probably driving the earlier inhabitants before them westward and northward into the mountains. Later came the Brythons, or Britons, speaking another Celtic dialect, or what is now called Welsh. Before we hear of Britain through the fully civilised Romans, these Brython Celts had occupied the south, the west, and the middle of England, and had pushed the Gaelic Celts, with

THE DAYS WHEN THE WORLD WAS YOUNG



A PREHISTORIC MOTHER THREADING A NECKLACE FOR HER CHILD

THE STONE AGE MAN FINDS A NEW POWER



HIS FIRST BRONZE AXE

THE CHILDREN'S TREASURE HOUSE

remnants of the older inhabitants, into the mountains of Wales, Cumberland, and Scotland. Ireland had already been occupied by the Gaels.

The Brython Celts were a much more civilised people than their Gaelic cousins, and were prepared to accept a still higher state of civilisation. These were the British people with whom the Romans came into contact when they invaded the island, and whom they conquered without much trouble, a people who adapted them-

was occupied chiefly by these Brythonic Celts or Britons, with, probably, some remnants of the earlier inhabitants and of Gaelic Celts, who had together been driven into inaccessible parts, like the Derbyshire Peakland and the Pennine moorlands. Wales was partly occupied by a mixture of Gaelic Celts and earlier inhabitants, particularly in the South, and by Brythonic Celts, who occupied the North and soon dominated the whole country. For a time there must have been a close union in Wales



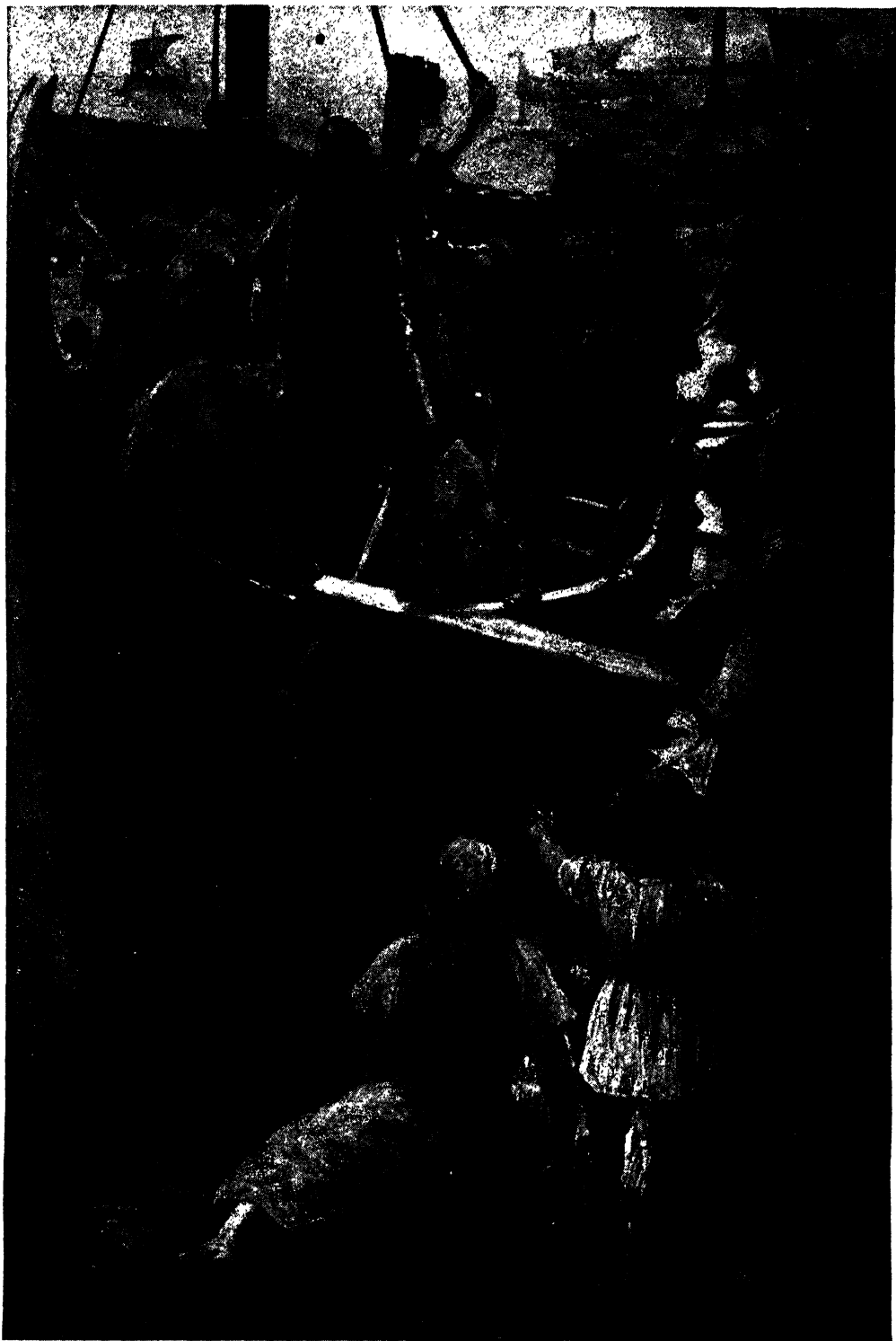
THE ROMAN CONQUERORS OF BRITAIN 1800 YEARS AGO BUILDING A WALL ACROSS ENGLAND
Part of the wall still stands in ruin in the North. This picture, by Ford Madox Brown, hangs in Manchester Town Hall

selves readily to Roman ways, and, both during the Roman occupation and later, completely Britonised all the West so that the Gaelic language disappeared from that part of Britain, and the Brython tongue in three dialects—Welsh, Cornish, and Breton—became the prevailing language through Western France and Western Britain south of the Mersey. Thus the Gaelic Celts were wholly suppressed here so far as their language was concerned, and only retained hold of Ireland. Cumberland, the Isle of Man, and parts of Scotland, where the Brythons had never penetrated. We reach a time, then, when England

of the two first races against the oncoming Britons or Welsh, for in whole mountain districts of Wales to this day the great bulk of the people are clearly descendants of the pre-Celtic race, which seems to have united with the Gaelic element and absorbed it. The Britons dominated South Wales by their government and speech, but did not people it.

Nearly all the accounts we have of the Britons by Roman observers tell us of a tall, handsome race, with flaxen hair and blue eyes—a romantic, impassioned, and in some ways artistic people. But the men of the Welsh interior, who now speak the

THE GERMANS WHO REALLY CAME TO ENGLAND



THE HEROIC SAXONS FROM THE BANKS OF THE RIVER ELBE, IN GERMANY, SETTING OUT TO COLONISE ENGLAND A THOUSAND YEARS AGO

THE SAXON LOOKS OUT FOR THE DANE



THE EARLY ANGLES AND SAXONS IN THE BRITISH ISLES LIVED IN CONSTANT WARFARE WITH DANISH INVADERS BEFORE THE FINAL FUSION OF THE RACES

THE HAPPY PEOPLE OF KING ALFRED'S ENGLAND



OUR LAND A THOUSAND YEARS AGO—THE WOMEN AND CHILDREN OF KING ALFRED'S DAY
WATCHING THE DIM BEGINNINGS OF THE BRITISH NAVY

THE CHILDREN'S TREASURE HOUSE

language of the Britons, are often a short, round-headed, black-eyed race, quite unlike the typical "ancient Briton." There the earlier strain of the mountain refugees who came before the Celts is stronger than Gaelic and British blood, and in the South Wales interior the Gaelic Celt has disappeared almost as completely from sight as from sound. His physical type is rare, and his language unknown.

What the Romans Found Here When They Landed with Their Legions

What the Romans found when their four celebrated legions landed in the South and possessed the land was a scattered British people living in hamlets, and not in towns, with the beginning of some art and industries among them, but bordered in the west by a mixture of less-civilised Gaelic Celts and earlier inhabitants, and on the north by Gaels, mixed again with descendants of the earlier breed. Within the limits of their frontier towns, such as Exeter, Gloucester, Chester, and York, the Romans developed a considerable amount of civilisation that was untouched by the Gaelic raiders who from time to time descended on the northern defences. Before the Imperial troops were withdrawn, at the beginning of the fifth century, twenty-eight towns had been established, and innumerable camps connected these towns along the well-made roads which crossed the country in all directions.

No doubt during the 350 years of Roman occupation of Britain many time-expired Roman soldiers settled in the country and made it their home. When a Roman soldier had served through twenty-five campaigns, he was discharged honourably from the ranks, and he and his descendants after him were made citizens, whatever his previous social state or nationality had been.

The Centuries of Strife Between the Passing of the Romans and the Coming of the Normans

The same legion was often kept for many years in a particular country. No doubt many such men would settle down, with their families, in the lands they had garrisoned, more familiar to them, perhaps, than the lands where they were born. So, probably, a considerable element of foreign blood was introduced into Britain in the days when, under Gaels and Britons, it was a Celtic country.

But if the discharged Roman armies of occupation added in three hundred years any element of discipline and constancy to the nation's manhood, all separate trace of it was lost during the six hundred years

of strife which filled up the period between the going of the Roman conquerors and the coming of the Norman conquerors. In those six centuries a new population, renewed again and again by fresh waves of invasion, poured into the parts of England and Scotland which had been held by the men of Brython Celtic stock, and so far exterminated or absorbed them, or flung them back upon the earlier men of the mountains, that scarcely any trace of them remained in England, and a new race, with quite different qualities of character and temperament, laid the foundations of English and Lowland Scottish manhood.

Before, however, we turn to these newcomers, the most important of all the invaders of our country, because they have been chiefly concerned in giving its men their most distinctive features, we must consider what gains have come to Great Britain through the strains of population that are largely outside of the English breed, though they have been constantly mixing with it more and more as marriage among them keeps bringing all ancestries nearer to a common type.

The Qualities of the Many Peoples Who Sprang from One Race

The Welsh, the Irish, the Scottish Highlanders, the Cornishmen, the Bretons of France—all have qualities so similar as to suggest to us, even if we did not know it otherwise, that they sprang at some early period from one race. They are a poetical people whose sense of romance passes easily into superstition, and is tinged with sadness—a people of strange fancies, lovers of open-air life of a wild kind, as if there lived still in them some recollection of the days when the loneliest hilltops above the damp and treacherous forests formed their natural home. Their songs modulate constantly into melancholy cadences, and mourn over failures. They are swift in anger, sudden and quick in quarrel, brave on the spur of the moment, but are given to despondency in defeat.

They have imagination, hopefulness, ardour, but not the dogged tenacity that holds on into hopelessness and beyond. They are brilliant rather than staying, fanciful rather than practical, and they are likely to add the ornament of a somewhat melancholy charm to a mixed nation rather than to shape and lead it. In writing and song that are vague and dreamy they excel, and in speech they are profuse and ornamental; but they are often somewhat wanting in plain strength, and the sturdy deeds that need no herald or

WHO THE BRITISH PEOPLE ARE

commentator, but tell their own story. We can see, even today, why the Celtic peoples, Gaels or Brythons, were so largely dispossessed and dominated by more matter-of-fact peoples, but we could ill afford to lose the poetical fruits of the Celtic spirit of defeat.

Nothing shows more clearly the state of change and turmoil into which Britain was thrown during the six hundred years between A.D. 400 and A.D. 1000 than the repeated sweeping away of Christianity from the island, so that it had to be re-

be called by, and however unfriendly the feelings were between the earlier and later comers. Jutes, Angles, and Saxons poured into the land first for two hundred years, a fierce, hardy breed, lovers of fighting. When they had settled down in possession and become partly Christianised, and less ready for cruel warfare, they were followed by Danes or Vikings, who were still in the state in which the Saxons had once been, without fear and without pity, men possessed by the joy of adventure; and the



A PREACHER TELLING THE EARLY ENGLISH PEOPLE OF CHRISTIANITY, WHICH WAS SWEEPED AWAY FROM ENGLAND AGAIN AND AGAIN BEFORE IT WAS FINALLY ESTABLISHED

introduced again and again. There is no doubt that Christianity obtained a considerable hold on Central Britain during the occupation of the country by the Roman legions, but it was almost entirely extinguished by the coming of the heathen English from across the North Sea. The coast men of North-Eastern Europe, from the River Elbe to the Norwegian fiords, broke over the land in successive waves of destruction for nearly six hundred years, till all the original inhabitants and Celts were either submerged and blotted out or were driven into the mountains, and England and Southern Scotland became inhabited by a new people widely different in character from the earlier races.

These Northern sea-rovers were essentially of the same race, whatever names they may

fighting between these cousinly races was renewed again and again.

But the essential character of the earlier Saxon and later Danish invaders was so much alike that in the end they settled down together in peace and formed a single nation without the exterminating fights to a finish which had swept the Britons out of existence or into the distant mountains. Indeed, by the time of the Norman Conquest, the fusion of the Saxons and Danes was so complete that the most trusted English patriots, like Waltheof, were allied by birth to both branches of the race, and in the English people who emerged from this union afterwards, and include the Lowland Scots, we cannot separate the Danish from the Saxon elements, in appearance, language, or character.

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What are the features of that character? The first description ever written of our forefathers—while they were yet a Germanic people who had not ventured across the seas to find their permanent home in Great Britain—remains singularly true. It is by Tacitus, the Roman historian. He pictures our ancestors as a fine unmixed and independent race, unlike any other people, with stern blue eyes, ruddy hair, robust frames, and a strength that only appeared when they were aroused to sudden effort. He says they would be the slaves of no man; that they respected their women and held them in love and honour. They considered no disgrace so great as cowardice in battle. Fierce and cruel in war, they were content when the war was over to lay aside the sword and spear, and to plough their fields and cultivate their land in peace and quietness.

To this picture of a brave, strong people, lovers of freedom, somewhat sluggish but terrible when



THE VIKING LEAVING HOME ON ONE OF HIS DARING VOYAGES OF EXPLORATION AND CONQUEST

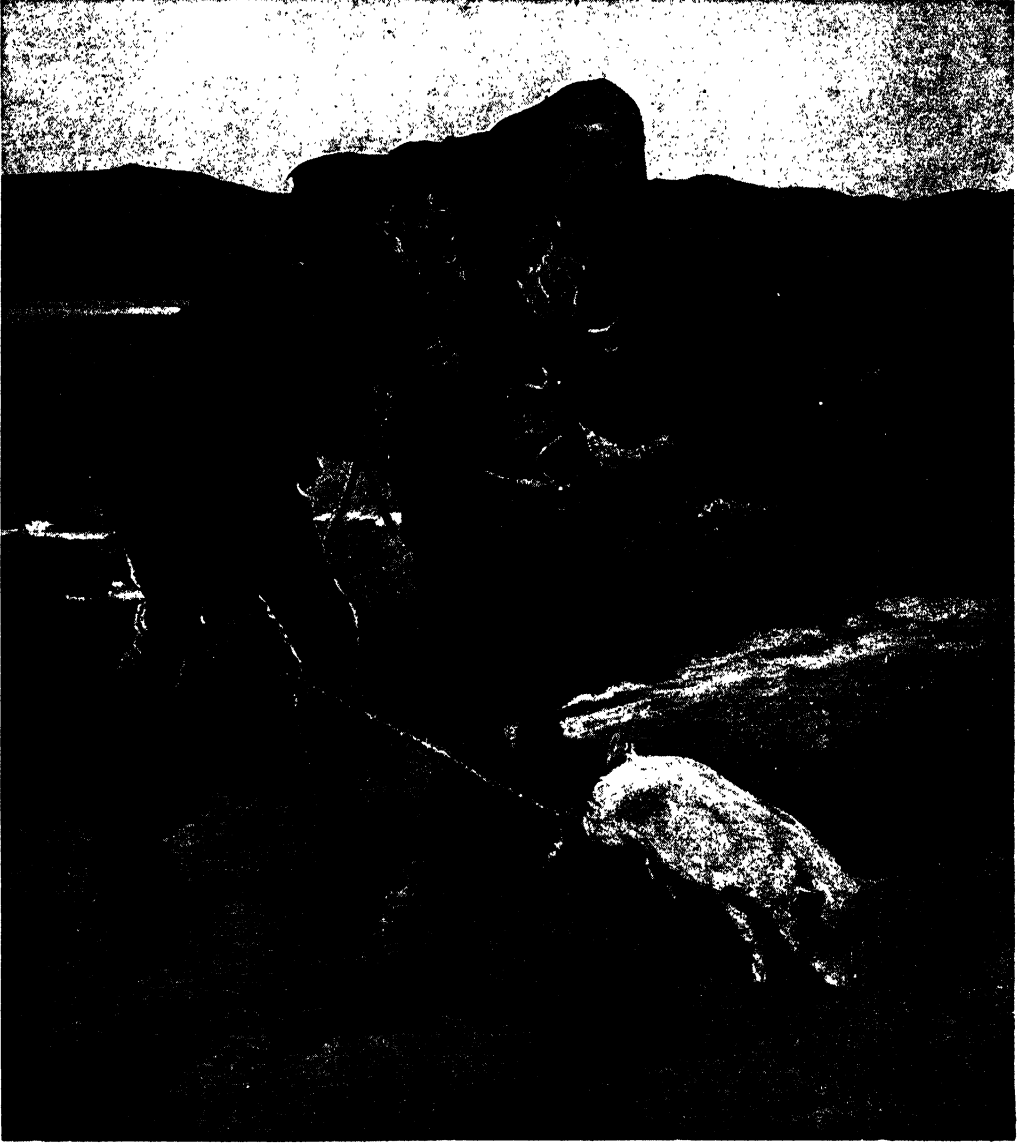
roused, must be added a strong strain of adventurousness developed specially during the centuries of invasion by the last-comers of the race, the daring Northmen, who began to count the sea their home as much as the land. Here we see the broad foundations on which the English character has been built, a character that makes itself most plainly visible, after another thousand years, in the world-wide British Empire, world-wide British trade, and world-wide freedom in forms of government.

The coming of the Normans, under William the Conqueror, did not greatly alter the character of the English nation, for the Normans were really of the same type as the bulk of the English people, though polished by contact with French culture; and, though they formed for a century or two a ruling caste hateful to English ideas, they presently became Englishised, and a united nation arose, with English ideals, falling back upon old English laws, and speaking a

WHO THE BRITISH PEOPLE ARE

newly formed language based on, but improving, the old Saxon, and mingling with it the Latin of the religious houses and the French of the Court. In 250 years after the battle of Hastings the mixture of Saxons, Danes, and Normans was complete, and in all essential points modern England was started.

tinctive mark here. They were thought of chiefly as savage and ruthless destroyers. In the end they mingled with the inhabitants previously here, and no one can point to any characteristic work of their hands or minds. But the Northmen who seized the part of France that was called Normandy,



A PIG, A PIPE, AND AN IRISHMAN

Perhaps the most wonderful of the changes that followed the wanderings of the Northern-sea-going people was the formation of the Duchy of Normandy, and the effects wrought in France on the bands of Northmen who invaded that country. The Northmen who came to England made no dis-

after them, rapidly conformed to French ways, adopted the French tongue and French ideas, and received a degree of polish that was unknown among the plain, homely people of England who had descended from the hardy Saxons and Danes. This refinement is visible to us today in the

THE CHILDREN'S TREASURE HOUSE

expression which these bands of people found through church architecture. Some remains of Saxon buildings are still left. The work is simple, and displays no imagination or nobility of conception. The Normans, on the other hand, built noble edifices, strong, lasting, boldly beautiful, age-long signs of a masterful people, with a high sense of dignity. There is no doubt that Norman taste and manners added valuable elements to English life, giving it some sense of art and beauty, as the Celtic mixture was later to give it sentiment and personal charm.

These influences from outside—Celtic dreaminess and Norman dignity—were as leavens working in the rather plain material of the average English nature, which, however, rarely becomes highly sentimental or dignified or artistic, but is rather strong, steady, tenacious, dogged, and somewhat distrustful of what is not commonplace.

Thairs not to reason why,
Thairs not to make reply,
Thairs but to do or die,

written of British soldiers, represents very well the permanent national trait of fidelity which never gives in, but succeeds at last in things that at first seemed impossible.

All the racial elements have been mixed and mixed and mixed again in the British Islands through our country's long, eventful history, and to them have been added, in smaller degrees, some of the best blood of the finest European nations, who have sought our hospitable shores in comparatively recent times as refugees. Thus the Flemings and Walloons of the Low Countries

brought here not only a finer skill in manufactures, such as the manufacture of woollen goods, than we possessed, and so transferred much trade to England—as the Huguenots of France established the silk trade here—but these people, seeking a land of freedom because they would not change their opinions at the word of command, transplanted into our English stock rare qualities of character that are often seen in their descendants—the children of men who became English by wish and will.

No country, indeed, owes more to emigrant genius than ours. For several centuries a selection of the cleverest men of all nations has been settling here and becoming naturalised, because British freedom has given them fuller scope than they could find in another land.

Tacitus made a strong point of the fact that the German tribes of his day were a pure stock, unmixed with less favourable strains than their own. But his observation would not hold good of the English descendants of those tribes. Their qualities are due largely to the fact that they are a mixed race, and not of pure descent from any one family of mankind; but their qualities also are due to the fact that the component peoples of the British Isles have been isolated, and so, though mixed by birth, they have gained a national cohesion, while their life on the sea, a necessity of their existence, has fostered the spirit of daring and adventure, and long freedom from conquest, ever since the nation became really united, has stimulated the just pride which the triumph of freedom has allowed to grow.



THE BEGINNING OF CIVILISATION IN ANCIENT BRITAIN

THE MEN WHO TO THEMSELVES WERE TRUE



THE STERN HIGHLANDER WHOM NOTHING WOULD INDUCE TO GIVE UP HIS FAITH—A SCOTTISH STONE-BREAKER AND HIS DAUGHTER



THE HUGUENOTS, THE PROTESTANTS OF FRANCE, LEAVING THEIR COUNTRY FOR CONSCIENCE' SAKE, TO SETTLE IN ENGLAND, WHERE THEY ESTABLISHED THE SILK TRADE

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ENGLAND

I FEEL in regard to this aged England, with the possessions, honours, and trophies, and also with the infirmities, of a thousand years gathering around her, irretrievably committed as she now is to many old customs which cannot be suddenly changed ; pressed upon by the transitions of trade, and new and all incalculable modes, fabrics, arts, machines, and competing populations——

I see her not dispirited, not weak, but well remembering that she has seen dark days before ; indeed, with a kind of instinct that she sees a little better in a cloudy day, and that in storm of battle and calamity she has a secret vigour and a pulse like cannon.

I see her in her old age, not decrepit, but young, and still daring to believe in her power of endurance and expansion.

Seeing this, I say, All hail, Mother of Nations, Mother of Heroes, with strength still equal to the time ; still wise to entertain and swift to execute the policy which the mind and heart of mankind require at the present hour, and thus only hospitable to the foreigner, and truly a home to the thoughtful and generous, who are born in the soil.

So be it ! So let it be !

EMERSON

THE LITTLE BRITISH ISLANDS

WHEN people abroad speak of the British Islands they are thinking of the two largest islands of Europe—Great Britain and Ireland—which together form the United Kingdom; but we who live in these islands should know that there are scores of them inhabited permanently. It is true that, with the exception of the Channel Islands and the Isle of Man, they are reckoned, for purposes of Government, as parts of the English, Scottish, Welsh, or Irish counties nearest to them, unless, as in the case of Anglesey, the Orkneys, and the Shetlands, they are important enough to be a county by themselves.

But though the many smaller British islands are only parts of the neighbouring counties, the people of each have their own proper pride—sometimes with good cause. They do not usually, however, carry their pride as far as the Scottish minister on one of the tiny islands that guard the entrance to the River Clyde. He, it is said, prayed habitually, in his church service, for “the Greater Island of Cumbrae, the Lesser Island of Cumbrae, and the adjacent islands of Great Britain and Ireland.”

If, as we look at the islands that fringe our coasts, we traverse tens of thousands of years, as the geologists can, we see that islands come and go, though the time taken to come or to go is enormous. Thus there was a time when Great Britain itself was not an island, but was joined to the Continent, and when the English Channel was only a river. Then Scotland stretched away northwards past the Orkneys, the Shetlands, and the Faroe Islands, probably as far as Iceland. Much of this land has been weathered and washed away, or has slowly sunk, till the many islands that we know, large and small, have been formed. Now, instead of increasing, they tend to diminish in number by being joined to the mainland.

In early times islands were important and well known for two somewhat contrary reasons. Skirting the country,

and often cut off from it by dangerous seas, they formed welcome places of refuge and retirement; but in periods of invasion they were avenues of approach to the mainland. Their story is interwoven with religion and war.

They were the first places to be reached by all that was best and by all that was worst in those far-off days—by the saintly lives and gentle teachings of the men who were spreading Christianity to the farthest bounds of Europe, and by the inroads of the terrible sea-wolves of the North, the heathen pirates from whom our race so largely springs. Saxon and Dane came, each in turn, with sword and flame, and seemed to be sweeping the gospel of gentleness out of existence. Yet each in turn was conquered by it, and then formed in our country a blend of goodness and bravery that a thousand years later influences men for good to the ends of the earth.

There are Holy Islands, that once were in the deepest sense regarded as holy, off the coasts of England, and Wales, and Scotland, and Ireland, though in the case of Ireland they do not take this English name. Each of them was regarded as holy for the same reason. To them came the earliest missionaries of Christianity, in the days before the Church of Christ had become rich with worldly wealth and powerful with the arm of military might.

The founders of British Christianity, first in Ireland and then on the west coast of Scotland, and afterwards by a natural progression in the North of England, were men who were content to live in the loneliest and wildest places, in quite simple ways, if they could thereby spread among heathen and partly savage people the sacred truths they regarded as beyond all price; and the places where they settled to carry on this work were, at first, the little islands round our coasts. It was from these islands that the old British race of the British Islands was largely Christianised; and the memory of it has never faded through all the turmoil of succeeding ages, so that we

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have a Holy Island off Northumberland, a Holy Island off the Welsh coast, a Holy Island off the western Scottish coast, and a little Isle of the Saints off the Irish coast.

If we begin at Berwick and travel southward, we shall quickly reach some small Northumbrian islands that tell the story quite commonly told by such islands all round the coast.

Two miles away from the shore, opposite Beal Station, on the North Eastern Railway, across wet sands at low tide, is Holy Island, or Lindisfarne. Now, on its thousand acres—the size of a large farm—are the remains of a fine Norman church. There is also a residential castle, that was used as a garrisoned outpost on the flank of Scotland by Henry VIII., and a village where about four hundred people live. Once this diminutive island was the seat of a bishop. Here, centuries ago, Christianity first reached Northumbria.

King Oswald, a Saxon king, after time had tamed the fierceness of his race, asked a monk named Aidan to come and try to Christianise his people, and the preacher, in 635, selected this island for his home and church. There he died, and was succeeded by Cuthbert, a pious hermit of Farne Islands, who had previously declined an offer of a bishopric which he afterwards accepted.

HOW THE PIRATE DANES DROVE ST. CUTHBERT'S FOLLOWERS FROM HOLY ISLAND

For about two hundred and fifty years the successors of St. Aidan and St. Cuthbert clung to their island church, though again and again it was plundered by the Danes. At last they could no longer endure the barbarian fury of the pirates, and fled to Durham. Two hundred years later their successors returned to the island, and built gradually the abbey which is still impressive in ruin after centuries of decay.

Holy Island is always associated with the Farne Islands, a group of rocky islets in a dangerous sea, about ten miles to the south-east. Only two of these wave-lashed islets are inhabited. One, the Longstone, has a lighthouse made for ever famous by the modest bravery of Grace Darling, who, in 1838, rowed a boat through a fearful storm with her father, the lighthouse keeper, and rescued nine shipwrecked people from the rocks, where many had been drowned.

It was on the largest of these tiny islands—only about twelve acres in size—where now a dozen or so people live, that St.

Cuthbert sought solitude, with prayer and meditation, before he was called to be the Bishop of Lindisfarne. Here, sheltering in a little hut, he lived on the scanty produce of the islet. Here, when he was bishop, he retired from time to time to “renew a right spirit within him” by lonely devotions; and here he died. He was the type of man who, under vows of poverty, prayer, and gentleness, first introduced Christianity to England.

THE FIRST BIT OF ENGLAND THAT OUR ROVING FOREFATHERS SAW

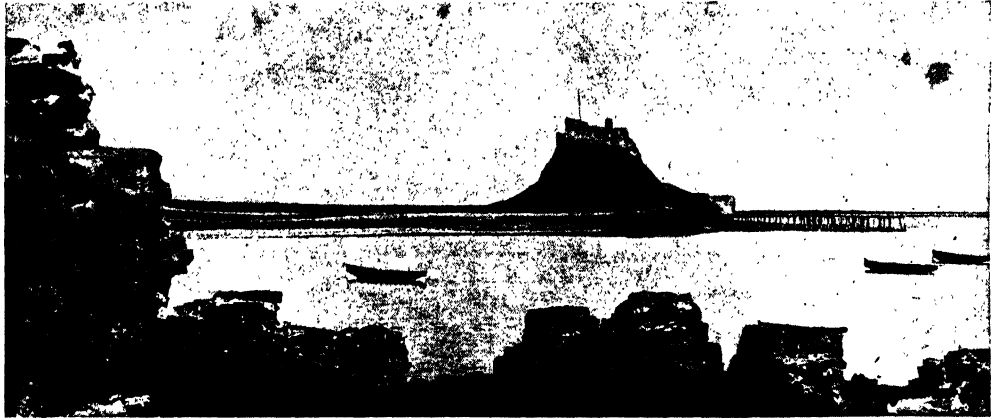
Following the East Coast, we reach, south of the Thames, Sheppey, or “sheep island,” still noted for its pasturage. It is so little of an island that you can cross to it by rail or road. On it is the port of Queenborough, where we can embark for Holland, and the naval dockyard of Sheerness. Like Thanet, farther to the east, Sheppey does not give the visitor the feeling of being on an island. During the Roman occupation Thanet had its dividing strait defended by two strong fortresses; but when the Romans were gone it was the first strip of England to fall under the government of the Jutish chieftains Hengist and Horsa. Its North Foreland, thrust out into the sea, is not only the beginning of England, as our roving forefathers would see it when they came prowling with their long boats across the North Sea, but it is the beginning in history of England for Englishmen. Now it is crowded with seaside towns—Margate, Ramsgate, Broadstairs, and Westgate—and few people know that ships once made a short cut behind it to the English Channel.

THE ISLAND WHICH WAS ONCE THE LURKING PLACE OF ENGLAND'S FOES

As the Jutes used Thanet as a starting-point for their attacks on Kent, so they used the Isle of Wight as their “base of operations,” as soldiers say, for their attacks on Hampshire and Southern England; and in this they were imitated in later centuries by the Danes. They landed on the mainland, fortified a position on Hengistbury, or Christchurch, Head by making a ditch and embankment, still visible, across the neck of land joining the headland to the mainland, and from the shelter of this easily defended camp raided up the green valleys of the Stour and Avon.

The Isle of Wight, once the lurking-place of the foes of Britain, is now thought of as a mild and sheltered little land of holiday resorts. Into its past all English history is compressed in a miniature form.

LONELY LANDMARKS IN A NATION'S STORY



LINDISFARNE—THE HOLY ISLAND OF NORTHUMBRIA, THE BIRTHPLACE OF CHRISTIANITY IN NORTHERN ENGLAND



THE OLD PAGAN STONES OF STENNESS, WHICH HAVE STOOD FOR CENTURIES IN THE ORKNEY ISLANDS



IONA, IN THE HEBRIDES, THE LITTLE ISLAND WHERE SIXTY SCOTTISH, IRISH, DANISH, AND NORWEGIAN KINGS ARE SAID TO LIE

THE CHILDREN'S TREASURE HOUSE

The Romans held it, then the Jutes, then the Danes, and later the French raided it again and again. Standing right in front of the fine seaport of Southampton and the great naval port of Portsmouth, it helps today more than ever before in the defence of England, its wooded shores concealing numerous hidden forts.

"The Island," as people in the South always call it, is so important that the geography books all tell of its inland capital, Newport, of Cowes and its yachting, of Ryde and its great pier, of Carisbrooke Castle, where Charles I. was imprisoned, of Farringford, where Tennyson lived, of Osborne House, which, after the death of Queen Victoria there, was given by King Edward to the nation. The Royal Naval

On the French side of the Channel, fifty miles from the nearest point of England, but only four miles from the nearest point of France, lie scattered the Channel Islands, the last remnant of the wide-spread territory once owned in France by English kings. Though the French have made attacks on the islands in time of war, and for short spaces have held one or other of them, the possession may be said to have belonged to England since the Conquest as the one part of the old Duchy of Normandy retained. Still, the official language remains French, but both English and French are spoken.

All the Channel Islands are together about half the size of the Isle of Wight. The approach to them through shallow, rock-strewn seas, swept by swift currents, is



THE WILD HOME OF THE SEA BIRD—THE PINNACLE ROCKS ON FARNE ISLANDS

College now trains all the officers of the British Fleet at Osborne.

Someone has called the island "the Garden of England," an inappropriate name that disappoints many visitors, for much the greater part is not at all garden-like. Inland are rather bare chalk downs. The attractions are on the coast. They consist of narrow little valleys deeply cleft through soft cliffs. The "chines," as they are called, are often clothed sweetly with vegetation. On the south-east side of the island a great landslip has tumbled the coast down in confusion till the stone heart of the hills is laid bare. Over these hillocky ruins trees and vegetation have grown, making a romantic wilderness. This "Undercliff" region—between Ventnor and Sandown—is the mild home of many who need a sheltered retreat.

They are self-governed in two groups, one consisting of Jersey and some small islets, and the other of Guernsey, Alderney, and Sark, with small islets. The bringing of Christianity to the natives is commemorated in the name of the capital of Jersey, St. Helier, for one of the first missionaries was named Hilerius.

The most beautiful of these fertile, mild-weathered islands is rocky little Sark, where about 600 of the 95,000 Channel Islanders live. The islands are like a series of vegetable gardens, and provide the English markets with early spring produce. The climate, never severe, is rather moist and, when the warmer weather is coming, foggy, and then the great lighthouse flashing from the dreaded Casquet Rocks often fails to keep ships out of danger. Many of the smaller islands of the British

SENTINELS OF THE SMALLER BRITISH ISLANDS



SENTINELS OF THE SOUTH—THE NEEDLES, OFF THE ISLE OF WIGHT



SENTINELS OF THE NORTH—THE "MAIDEN" ROCKS OF SKYE

THE CHILDREN'S TREASURE HOUSE

seas are as noted today for their lighthouses, guiding the anxious mariner, as some of them were noted in the far-off past for sending the light of religious truth to the neighbouring mainlands. If you stand at Land's End, in Cornwall, by night, it is the lighthouses on land and out at sea that draw your sight here and there, while the weird cries of the sea-birds on the rocky coast haunt your ears.

On one hand the light of Pendeen Lighthouse flashes forth ; on the other the Lizard. At hand is the Longships, on the nearest rocks at sea ; far off the Wolf speaks to the ships as they reach the mouth of the English Channel ; and then, away to the west, are two fainter lights—the Bishop Light and the St. Agnes Lighthouse, on the low, granite Scilly Isles, twenty-five miles away.

getic owner, who taught the people what to cultivate and how to sell their produce. His name was Augustus Smith, and he became known as the King of the Scilly Isles. He caused, at any rate, one part of the fruitful earth to bloom and smile.

Everyone who has travelled by road along the coast of North Cornwall or North Devon must have had his sight drawn constantly away to where Lundy Island rises abruptly from the sea. Its rocks seem to spring up as straight as a wall, and as the island is only about three miles long, and more than 500 feet high, it has a solid, lumpy appearance. It is often looked upon as the countryman's weather-glass.

When Lundy's plain it will be rain,

When Lundy's high it will be dry

is the local rhyme, and very true it proves.



THE PICTURESQUE PORTELET BAY, AT JERSEY, IN THE CHANNEL ISLANDS

These islands, about forty, but a hundred and forty, if we include outcropping rocks with names, are now known chiefly for their growth of train-loads of spring flowers for the London market, but in olden days they were strewn with the wrecks of ships.

King Arthur's fabled Land of Lyonesse is supposed to lie under the sea between Cornwall and the Scilly group. Long, indeed, must these warm but watery islets have been inhabited, for there are remains of men of very early races in primitive tombs. The islands cover about four thousand acres. The people number about two thousand, young and old, and they live only on five of the islands.

The prosperity of this lonely community dates from the year 1831, when the land came into the possession of a wise and ener-

Sometimes, though it is twelve miles away from the nearest point in Devonshire, and may be quite twenty miles from the observer, it is so plain that the waves can be seen whitening the feet of the granite cliffs. Then again, though visible, it looms high, misty, and ghost-like.

There is no land in British waters that lends itself to romance more naturally than Lundy Island, for it has been the genuine residence of pirates as late as the seventeenth century, and smugglers into the nineteenth century. Its lofty granite coast is riven deep in many places, as if by earthquakes. There is only one safe landing-place, where a little beach has been formed under the shelter of a small island called Rat Island. A lofty lighthouse acts as a guide to ships entering the Bristol

HAVENS OF REFUGE IN THE CHANNEL ISLANDS



THE OLD NORMAN FORTRESS TOWERING OVER THE VILLAGE OF GOREY, IN JERSEY



THE TINY WALLED-IN HARBOUR OF SARK, THE GEM OF THE CHANNEL ISLANDS

THE CHILDREN'S TREASURE HOUSE

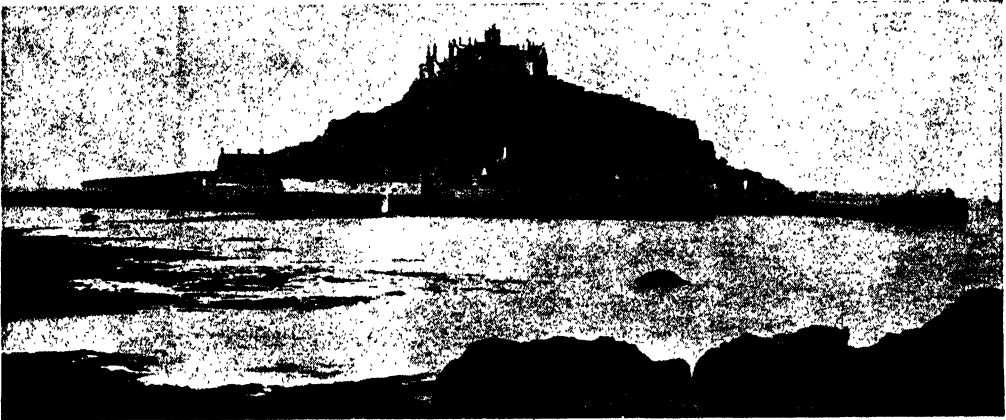
Channel, and below it a battery fires warning guns at intervals in bad weather.

The rugged coasts are inhabited by myriads of birds, so much at home that they scarcely move away from any human wanderer. The granite of the island has been worked at times on the eastern side. Some of it was used in building the Victoria Embankment in London. Once the island belonged to the great seaman Sir Richard Grenville, who was born on the Cornish mainland opposite; and now, too, it has a single owner. Its inhabitants number nearly a hundred. This inaccessible land has mysterious round towers and ancient graves whose story no man knows.

The islands of Wales, large and small, are all noted for their religious history. Thus, Caldy Island, outside Tenby, has remains of the chapel that commemorates its special

The persecuted monks braved these dangerous passages where their persecutors were not likely to follow them. Well does Bardsey deserve its Welsh name of "the Isle of the Swirling Current."

Anglesey, the county island of Wales, is famous for its religious traditions, dating back far earlier than the Christian story of the Welsh islands. It was renowned as the centre of the druidical religion of the ancient Britons, and their stone burying-places are more numerous here than in any part of England or Wales. It was known to the Romans, who no doubt occupied it to break the power of the Druids. The presence of copper in the island, a mineral that was much used in ancient manufactures, was also, no doubt, a reason for the settlement of the Romans here. Now Anglesey is chiefly known as part of the direct route to Ireland,



ST. MICHAEL'S MOUNT, THE PYRAMID ROCK OFF PENZANCE, AND ITS IMPRESSIVE CASTLE
PACKED WITH ANCIENT TREASURES

saint of the olden times; and Ramsey Island, the largest of several near St. David's Head, was said to be the home of St. Justinian; while Bardsey Island, at the end of the Llyn peninsula in Carnarvonshire, is quite a cemetery of saints. Here twenty thousand monks were buried. Formerly there were pilgrimages to the island. There is no doubt that in the terrible days when men belonging to the religious orders were being sought and slain with ruthless cruelty by heathen Saxons, and later by heathen Danes, this island was a place of refuge. The reason for that was the danger of approaching it through the swift seas that rush between it and the mainland. Though the island is but four miles from the Welsh shore, it can only be reached by a boat at special times, when the tide and weather are favourable, and then the visitor has to pay a sovereign for the boat.

the London and North Western Railway crossing to it by Stephenson's tubular railway bridge over the Menai Straits, and again bridging the sea to Holyhead Island, where stands the port and considerable town of Holyhead, only 64 miles distant from Kingstown, in Ireland. The Welsh princely house of Gwynedd, mentioned in the "March of the Men of Harlech"—"raise the sword of Gwyneth, freedom ever winneth," lived in Anglesey, which was long a rallying centre for Welsh patriotism.

Well within the memory of people now living, the Island of Walney, eight miles long, off northern Lancashire, was counted among the islands of England, but recently the vigorous shipbuilding town of Barrow has reached over and so clutched the island to the mainland, by its works and docks, that Walney, like Thanet, can no longer be thought of as an island.

LIKE A GARDEN PLANTED IN THE SEA



THE OLD CHURCH OF TESCO, THE MOST BEAUTIFUL INHABITED ISLAND OF THE SCILLY GROUP



THE GIANT FERNS THAT GROW IN THE SUB-TROPICAL CLIMATE OF THE SCILLY ISLES



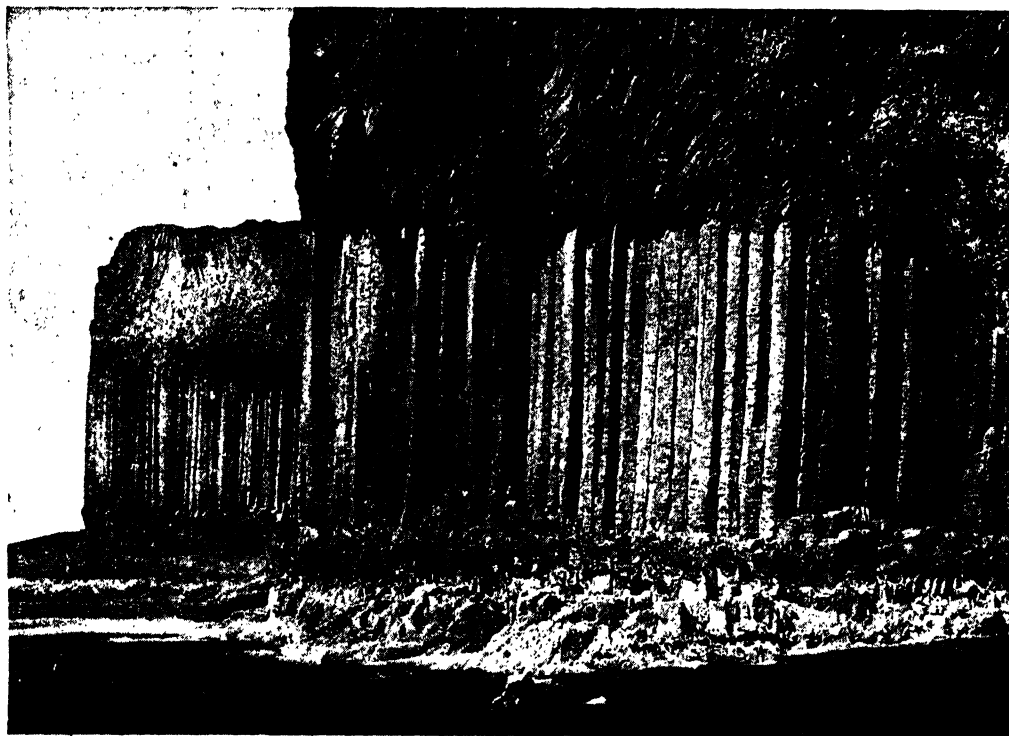
THE LOVELY FLOWERS WHICH BLOOM IN THE WARM SPRING BREEZES OF THE SCILLY ISLES

THE CHILDREN'S TREASURE HOUSE

The beautiful Isle of Man is much the most interesting of the islands in the southern half of Britain, if it can be regarded as belonging to the English half. Its history is almost as attractive as its singularly varied natural beauty. At first Man, or Mona—a name which, according to the Romans, it shared with Anglesey—was inhabited by Celts, and the Manx language is still Celtic; but early in the days of the Northmen's raids it was captured and many of its oldest monuments bear inscriptions in the ancient Norwegian language. The people are a mixture of

valleys with their tumbling streams, steeply and deeply, cleaving their way to the sea, are romantic in a high degree, and its central hills rise barely almost to the dignity of mountains. Indeed, Snaefell, the highest, looks forth westward to Ireland, northward to Scotland, and eastward to England, from a height of over 2000 feet, and on a suitable day salutes the Wicklow Hills, the Mourne Mountains, the wilds of Scottish Galloway, and the clustered peaks of the Cumbrian Mountains.

The islands of Ireland are not important, either in size or commercially, but they are



FINGAL'S CAVE, STAFFA—THE FIRE-FORMED COLUMNS THAT MARCH FROM THE GIANT'S CAUSEWAY IN IRELAND TO STAFFA IN SCOTLAND

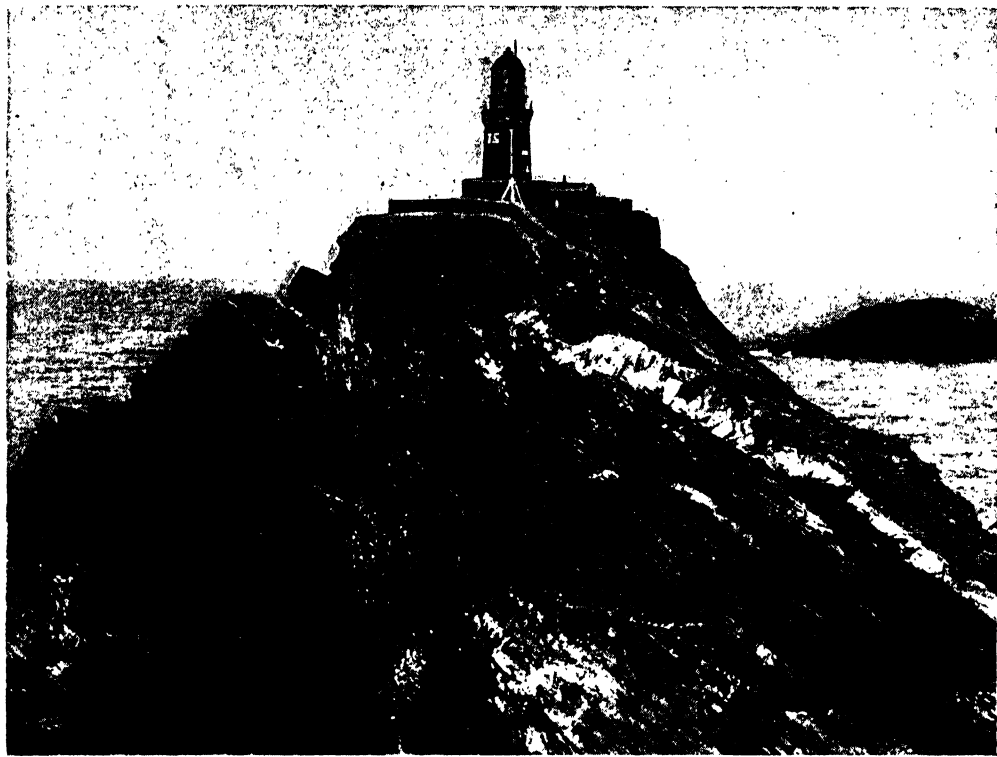
Celts and Norwegians. Later, there were struggles between England and Scotland as to which land Man properly belonged. Now the island has its own government, and it has prospered greatly since it was left to rule itself as a part of the British Islands.

Though the islanders have some mineral wealth, such as lead, on which they work, and valuable fisheries, their living is more largely derived from the multitude of visitors who take their holidays there.

The island is one of the most varied and attractive regions in the world. It has a coast-line that is stern and grand in parts, and elsewhere wild and lonely. Its little

full of interest to the visitor, and in almost every case they tell a story. Thus, if we pass round the south-west of Ireland, doubling Cape Clear—itsself on an island—and the Fastnet Rock, which lights the way home for ships, and takes and sends wireless messages from its new lighthouse, we come to two abrupt rocks, called the Skelligs, off County Kerry. One rises sheer 700 feet out of the sea, and the other over 600 feet; and here, on the top of the lower of these rocks, up a precipitous path, is a giddily perched pilgrimage shrine, where some of the earliest founders of Christianity in Ireland retired to a solitary religious worship in the midst

THE LIGHT THAT SHINES AT BRITAIN'S HEAD



THE LIGHTHOUSE AT MUCKLE FLUGGA, UNST, WHICH SHINES 21 MILES OVER THE ATLANTIC FROM THE NORTHERNMOST POINT OF THE BRITISH ISLES



THE LOFTY CRAGS OF THE FARTHEST NORTH OF THE UNITED KINGDOM—UNST, IN THE SHETLAND ISLES, 188 MILES FROM A RAILWAY STATION

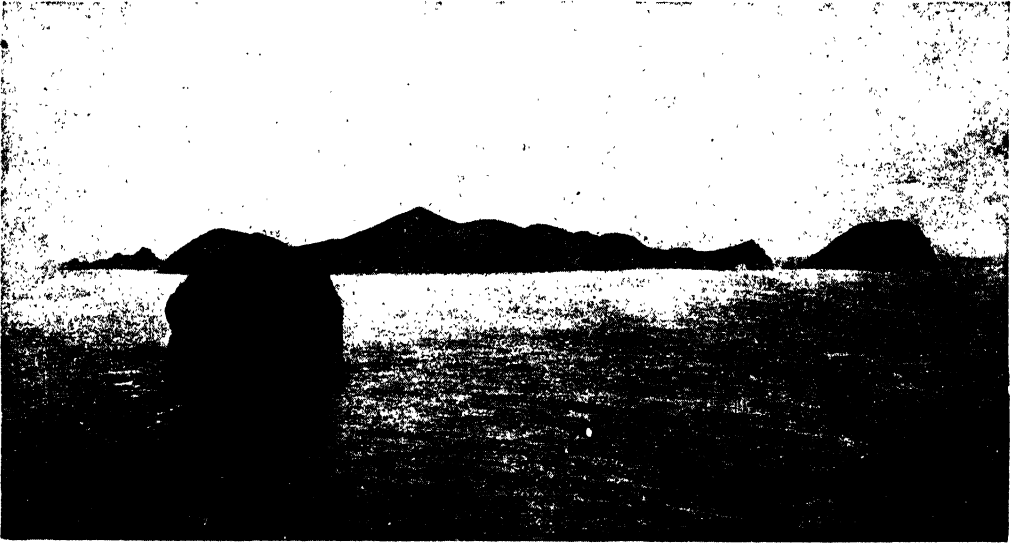
THE CHILDREN'S TREASURE HOUSE

of the wildest storms. Beyond the Skelligs is Valencia, the island from whence an ocean cable was first laid to America. Five ocean cables now reach the dry land here.

Midway up the western coast of Ireland, and partly sheltering the mouth of Galway Bay, are the Aran Islands, called in the Irish tongue the Islands of the Saints. There are three of them, the largest being Aranmore, for "more" means big in Gaelic and Irish. There life may be seen in its simplest form, with every child in the village school barefoot, and the grown-up people with their feet bound in rough felt-like cloth instead of shoes. In all parts of the islands are the remains of ancient chapels and strong stone forts, built in the dim centuries of which they are the only records, when these

birth, however unhelpful it may be to them. The western, or Atlantic, side of Achill is a stern coast, with enormous cliffs sloping gradually back. The Government has been very active in trying to show the pleasant, easy-going people of this edge of the British Islands how to fish and farm and save themselves from want.

If we continue northward along the western coast of Ireland, and then turn round the north-west corner and sail back towards Scotland, we shall pass one of the world's most celebrated lighthouses. It is on Tory Island, the most outlying part of County Donegal. To millions of people who have gone from Liverpool or Glasgow to Canada or the United States by the North of Ireland route, this light from Tory



THE HOME OF SEVENTY SUBJECTS OF THE KING—ST. KILDA, THE MOST REMOTE OF THE WESTERN ISLES OF SCOTLAND

islands were the successive outposts of war and religion, and religion conquered war.

The largest island of Ireland, and the most easily reached, is Achill, off County Mayo. Across the swift-flowing but narrow sound that divides the island from the mainland a bridge has been built, and the railway runs to the end of the bridge. This easiness of approach brings many visitors to Achill, though it is not a beautiful island. It is a bare and hungry land, with a soil that cannot grow enough to support the five thousand people who stay there because they love it. So they cross to England or Scotland for the harvesting, and then take their savings home to keep them through the months when their own poor island would starve them. Nowhere can we see more clearly how faithfully people cling to the land of their

Island is the last glimpse they have of the British Islands, or it is the first that welcomes their return, just as the Fastnet light says "Good-bye" or "Welcome home" if they go or come by the southern route. "Tory" in olden times meant "robber" in Ireland, and this island was the stronghold of a cruel band of pirates, before the days when the British Navy kept peace upon the seas.

The largest island off the North of Ireland—about six miles long, and affording a living for three hundred people—is called Rathlin. It was known so early that Greek and Roman writers of the first and second century mention it. The earliest voyagers preferred to land on islands, for on the mainland chiefs were more powerful. Rathlin proved a safe place of refuge for Robert

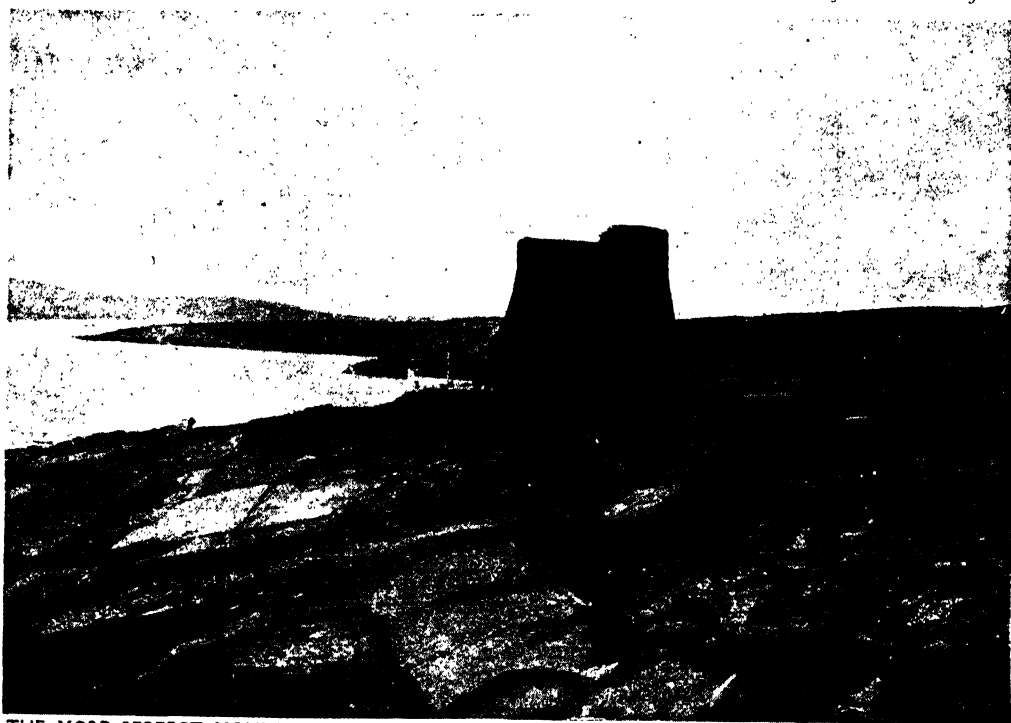
THE LITTLE BRITISH ISLANDS

Bruce of Scotland in the days of his deepest misfortunes. The ruins of his castle are still to be seen. In those days the island was regarded as belonging to Scotland.

The islands of Scotland all lie on the west or the north, and are so many that we can only group them here. They form five groups. First there are Arran, Bute, and the Cumbræ, in the Firth of Clyde, and sheltered by the long peninsula of Kintyre. Arran is so mountainous that it only has three roads in it, though the road round it is nearly sixty miles long. The other two roads cross it—one near the middle about twelve miles long, and the other, further

villages, with houses scattered thinly along its roads. Arran, however, shelters, in its Lamlash Bay, behind the Scottish Holy Island, the British fleet which guards the northerly sea approaches to both Glasgow and Liverpool.

Outside the Mull of Kintyre lie many islands, known as the Inner Hebrides, the largest being Islay, Jura, Colonsay, Mull, Tyree, Coll, Rum, and Skye, and the most interesting—Iona. Farther out in the Atlantic are the Outer Hebrides. These two Hebridean groups include 102 inhabited islands, the farthest off being the fowlers' island of St. Kilda, fifty miles beyond



THE MOST PERFECT MONUMENT OF AN ANCIENT RACE—A FORT SET UP BY THE PICTS IN THE DAYS BEFORE THE CONQUEROR, STILL STANDING ON THE UNINHABITED ISLAND OF MOUSA, IN SHETLAND

south, a little shorter. The whole island to the north of the central road is filled with rugged mountains, radiating from a central knot, and towering over deep, wild glens. From the highest peak of the central knot, Goat Fell, the view includes the southern half of Scotland, and as far south as the Isle of Man. Though Arran is so rugged in its lofty centre, its coasts are mild—thick with shrubs and gay with flowers.

Bute, a smaller island but more populous, forms with Arran one county. It is comparatively flat and tame, but contains Rothesay, a large and pleasant seaside resort, whereas Arran has only a few

Lewis, the largest of the Outer Hebrides. To the north, off the coast of Caithness, are the Orkneys, a group forming a separate county; and farther north still, the Shetlands, also a county.

Now, when people think of the Inner and Outer Hebrides, their minds probably dwell either on the large, gloomy island of Skye, with its strangely peaked and splintered mountains—the wildest in Great Britain—or they think of Staffa, a tiny island with famous caves of curious geological formation. But really the most interesting islands, if we consider what has taken place in them, are Colonsay and Iona.

THE CHILDREN'S TREASURE HOUSE

For at one time the Hebrides did not belong to Scotland at all, but to Norway, and had a Norwegian king. The Norwegian "King of the Isles" made Colonsay the centre of his government. This was about the same time as the Norman conquest of England, and the Norwegians continued their rule, under the title of Lords of the Isles, for more than two hundred years. Indeed, it was not till the eighteenth century that the rule of the clans, or tribes, that followed after Norwegian government, was broken up, and the islands became an ordinary part of Scotland.

Colonsay was named after St. Columba,

For many generations Iona was regarded as a sacred spot, and to this little island in the distant western seas—for it is only about three and a half miles long and a mile and a half across—came pilgrims from all parts of Europe, and kings and chiefs were brought for burial. It is said that sixty Scottish, Irish, Danish, and Norwegian kings are buried here, in what was regarded as very holy ground. Iona was once part of a bishopric extending from the Isle of Man to the Shetlands, and later it was annexed to the Norwegian archbishopric of Trondhjem. Its ruins were sternly defaced in Puritan times, but it now has a restored



A PEACEFUL INVASION—A DUTCH FISHING FLEET IN THE HARBOUR OF LERWICK, THE CAPITAL OF THE SHETLAND ISLANDS

an Irish preacher who first brought Christianity to the savage Picts of Scotland, and through whom the North of England became Christianised in the seventh century. Columba landed on Colonsay, and so it was named **after** him; but he made his home in Iona, or "the Island," as the Irish called it.

Iona was often called Icolmkill, which means "the island of Columba of the Cell," because there the preacher made his simple hut, and founded a monastery, from which preachers were sent forth; and there he died, in the year 597, early one morning as he kneeled before the altar.

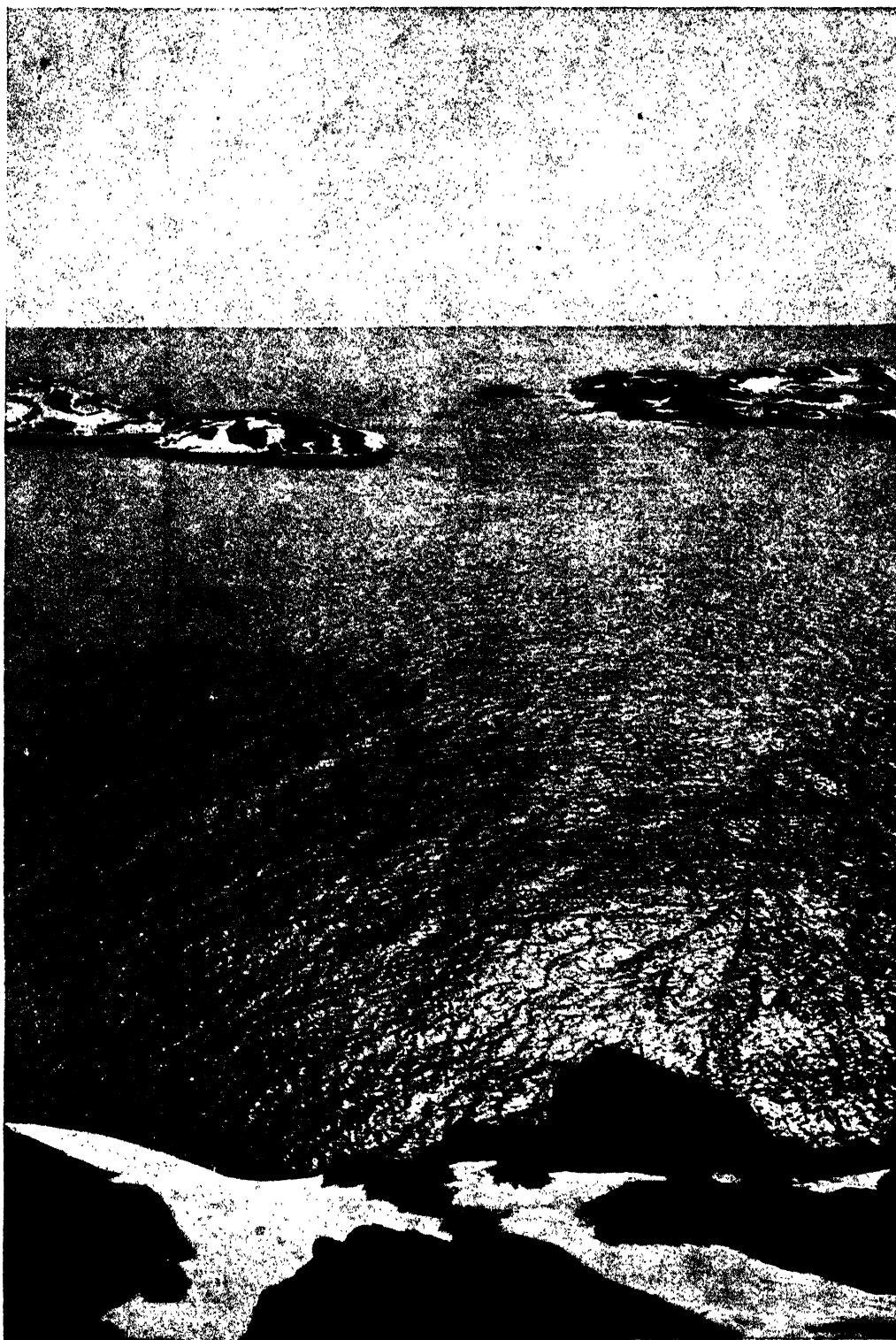
cathedral, and still we can see remnants of its ancient monastery and nunnery, and an impressive cemetery with many monumental stones. It is said that Macbeth was the last king buried here, but that is doubtful. What is certain is that from this remote island off the wave-worn coast of Mull came Aidan, the preacher who founded Lindisfarne, and brought Christianity to Northern England; and religious history marks it as one of the most sacred spots on Time's chart. It will be seen that the islands which fringe parts of the British homeland are choice, if small, and indeed are among the gems of the British dominions.

WHO WILL EXPLORE THE BRITISH ISLES?



THE FIVE THOUSAND KNOWN AND UNKNOWN ISLANDS THAT FORM THE UNITED KINGDOM.
The islands are not here drawn to scale in any way, and this page is to be taken as representing merely the number of islands that constitute one British group.

THE WATERS THAT GUARD OUR ISLAND HOME



THE SILVER SEA IN WHICH THE BRITISH ISLES ARE SET

THE SEA THAT MADE OLD ENGLAND.

*The North Sea! How the thought of it
thrills us today! And what ages on ages of
wonder have made its bed and put the North
Sea where it is, to*

*Serve us in the office of a wall,
Or as a moat defensive to a house,
Against the envy of less happier lands.*

FOR all we have and are, we who live in our British Isles may almost say we owe thanks to a little streak of water. The power that made us, that has maintained us, set up on a rock higher than itself, that has proved a barrier to our enemies, yet has given us the key to half the world, is the North Sea.

It is a little sea, as seas go, but it is the most important sea in the world. It is a stormy, fractious, swift-raging sea, of demoniacal force, of whirling, heaving treachery to those who fail to read its misty secrets. It has wrecked more mariners, swallowed more ships, been the scene of more terrible battles, than all other seas combined, yet it has bestowed greater benefits upon humanity than any or all of them.

*'Tis the hard, grey weather
Breeds hardy Englishmen,*

we may truly sing of the North Sea. It was the North Sea that bred Grace Darling. She was a child of the boiling sea, and lived in Longstone Lighthouse on the Farne Islands, off the coast of Northumberland. And when the little ship *Forfarshire* split in two upon the rocks, it was tender-hearted Grace Darling who insisted on rowing out, with her father, across the raging waste to save the men who still remained alive. They must have brave spirits who would face this terrible little sea.

In the two great divisions of the Atlantic more than 180 North Seas could lose themselves; the vast Pacific exceeds it in size by nearly 450 times and in bulk of water by infinitely more; yet it is our little North Sea which has made these swelling oceans important. A little sea, but a sea of magical history; rough, sullen, and

turbulent, yet the home of such teeming life as no other waters know; more fruitful in fish for man than any other waters, hot or cold, in all the world.

It began its work upon us as a great disruptive force, as Nature's giant chisel; it cut us out of land connection with the mainland of Europe, sank the high-roads that bound us, rushed in between, and left us what we are—a group of islands in the eastern Atlantic.

The North Sea cut us off and left us on a mountain slope with its feet in the water. But, having thus torn us from our holding, forged a channel through which to run, and so completed the division, the North Sea became kind. It gnawed and fretted and ground at our eastern coasts until it had worn out for us a series of indentations giving us the finest natural harbours in existence. It was as if the North Sea had determined, after snatching us from the Continent, that we should safely build and house our boats and ships, our squadrons and fleets, in readiness to sail against Europe, but that Europe should not have corresponding advantages with which to sail against us. That is what the North Sea has done for us.

Of course, the sea did not for ever keep out all invaders. It is well that it did not, or we might have remained a race of semi-savages. There have been beneficial as well as injurious decents upon us. It is a striking thought that the very place in the Isle of Thanet which received the first fierce sea-wolf from Jutland received also the man who brought the glad tidings of Christianity to our forefathers.

Only a valley divides us from the coasts of France, Belgium, Holland, and Germany; then the valley widens to divide us from Denmark, Sweden, and Norway. It is not really a deep valley for a sea; the greater part has a depth of only about 500 feet. It is shallower still when we come

THE CHILDREN'S TREASURE HOUSE

south. If we could transport St. Paul's Cathedral from Ludgate Hill and set it up in the middle of the Straits of Dover, the dome would be above the surface of the waves. If we take the Shetlands and the southern coast of Norway as its northern limit, with the Straits of Dover as its southern line, this valley has a length of some 600 miles. It is 400 miles wide where our coast-line recedes farthest from the Continent, but the narrow sea brings Dover within 21 miles of France.

The Sea that is Younger than the Ancestors of Some of our Animals

Standing on a steamer in mid-channel, we see France on the one hand, England on the other, and we can fancy ourselves in the middle of a lake. When we take a boat out on Lake Windermere, for instance, we are, at one end, exactly as far from the other end as we are from France and England when the steamer arrives midway.

Let us remember, then, that this extraordinarily important North Sea, upon which the history of the world revolves, is but a valley, a valley which, geologically speaking, is one of Nature's new inventions. The North Sea is not as old as the ancestors of some of the animals still in our midst; it is not as old as the first men who lived and fought and died in ancient England. The North Sea has made our nation great, and in its effects upon humanity the North Sea is the geological and geographical miracle of the world. It made the British nation and cradled the United States; it nurtured the forces which passed as a glowing torch to kindle the drowsy East into the life of new learning. But it is not old; it is young, as age goes in Nature. Where in all the world is there another valley comparable with this?

The Days of Long Ago when the North Sea was Dry Land

In the days before the valley, the British Isles were the westernmost extension of North-West Europe. The North Sea was dry land. That land, thrusting out unbroken from the Continent, included England, Scotland, and Wales, linked Ireland with us, and stretched out 230 miles westward of Ireland to the Atlantic. The old westerly extension of Ireland, the line now lying under the sea 230 miles beyond the existing shore, was the western coast of Europe. England was an inland province of Europe. Let us take a map, and in our fancy build up the land-bridges again. We know they once existed, because they are still found under the sea, where men have

traced them to the point at which they suddenly descend to great depths. There we reach the end of the old continental plateau. There, in unsunned deeps, lies the old coast-line, where life on the land divided from life in the waters. Parts of the old land still exist. We can trace the remains of it today in Finland, Scandinavia, and the North-West of Scotland. Other parts of it have gone. Volcanoes have boiled part of it into lava and ashes, and spread it afar. Frosts and winds and rains, heat and cold, have worn it away, doing in millions of years to a continent what we see them doing in a few generations to tombstones in a churchyard.

We do not know how much land was broken up in this great upheaval, but we can trace the destruction of part of one geological formation—that which we call the Silurian—and we know that this part alone of the old links which joined us to Europe, if we could collect it and set it up in a heap, would form a mountain ridge three times as long as the Alps. It would make a line of mountains 1800 miles long, 33 miles wide, and 16,000 feet high.

The Great Forces in the Earth that Played Pitch and Toss with Mountains

The sea had given the world that mass of land, which had all been laid down as sediment in the water, washed down from rocks older still; but all this was long before the North Sea was born. It was one of a multitude of changes which prepared the way. The waters and the land played leapfrog, as it were, millions and millions of years elapsing between the water over-leaping the land and the land rising in its turn above the water. Sometimes the Atlantic covered Europe hundreds of feet deep, and stretched away to Asia. The Alps lowered their towering peaks from time to time beneath the waves, for land levels changed again and again. Colossal forces in the fiery heart of the earth played pitch and toss with the mountains.

They pulled the Scottish highlands a thousand feet under the sea; they crumpled up the Alps and Pyrenees, dropping them in the recesses, and thrusting them up with such violence that the rocks of which they are built up were bent and folded over and over, the old rocks wrapping themselves over the new. Today we find rocks composed of sea-shells, which we know to have formed in the deep sea, a thousand to 1500 feet up the mountain sides, while old-time forests are now buried beneath the waters. The meaning of all this welter of terrors

THE NETS THAT BEAR THE FISHER'S HARVEST



THE FISHERMEN DRAWING IN THEIR NETS LADEN WITH FISH



MENDING THEIR NETS

THE CHILDREN'S TREASURE HOUSE

is, of course, that the earth was cooling and contracting on the surface while still hissing hot within. Gases were generating and burning below, rocks were melting and flowing like water, and the enormous expansion of the burning gases, combined with other causes, produced frightful earthquakes which would raise the surface of half a continent here, and let down half a continent there.

There were volcanoes everywhere; hundreds of their cones exist, cold and lifeless, in our land today. King Arthur's seat in Edinburgh is one. Little by little the inner coat of the earth cooled and solidified. Etna and Vesuvius were formed as blow-holes, and Europe began to fix its present shape. Then came the great Ice Age. Finland and the Scandinavian countries were as the North and South Poles are today; they became covered with deep ice, which crept, in the form of titanic glaciers, across the north-west extension of the Continent. It moved, this mighty mass of ice, over what is now the bed of the North Sea, and animals of the Arctic, the musk-ox, the reindeer, the lemming, the glutton, the mammoth, marched dry-footed into England. So did man. He was here with the mammoth and the ice.

Man and His Strange Companions in the Journey Across the North Sea Bed

After the Ice Age came a time of what must have been something approaching tropical temperature. Over the dry land which is now the North Sea roamed countless herds of deer, horses, wild oxen, bison, wild boars, three kinds of rhinoceros, two types of elephant, brown bears, and terrible grizzlies, wolves, foxes, wild cats, hyenas, lions, and tigers, such as the world has never since seen. And still man came with them. Man, the wild cat, the fox, and the badger are among the survivors of the great family which marched from Europe into the England that knew no North Sea. They walked here, feeding upon the abundant pastures or the teeming animal life which filled what is now the bed of the sea. They marched on foot into England from Europe as they would march today from Surrey into Kent. Men and animals marched by the same routes.

First came the ancient men with tools; it is supposed that the Eskimos are the descendants of these. Then came the newer workers of tools, bigger, more powerful, cleverer men, whose descendants are found today in the Basques of the remote valleys of the Pyrenees, in the dark little

men of Wales, and the little dark types of Irish natives. So we had got our animals and our men and women. Nature had stocked the land. *Then she shut it up.*

There came a lowering of parts of the land. Ireland had already been surrounded. The northern section of our land, through the sinkage of the portion which joined it to Europe, became detached. The sea broke over what had been the pathway of men and animals. Farther and farther south the waves ate their way. Perhaps there may have been subterranean sinkings to help; certainly much was due to what we call erosion, the wearing away of the land.

The Great Day when the Last Man Walked Across the Bed

The Straits of Dover were the last to appear, and the last bridge connecting England with Europe was broken. The valley was completed, and the water flowed through. The North Sea was born.

A stream of water poured between our land and its mother continent. From being the westernmost extension of Europe, we had become an island. A terrific day it must have been in the life of the last man across! He had come in on foot; to return he must go by boat. There was not an iron tool in all the world with which to make a boat; there was not, indeed, a boat. A log he could use; he might even know how to stretch the skins of animals on a framework of branches; but as the sea widened, and the white-topped waves raged where the green pastures had been, the little Neolithic man must have felt that the last days of his race had come. The men of a continent, who previously, even after the isolation of Ireland, could have walked with unmoistened feet from Wales in the west to the farthest limits of Asia in the east, had now become islanders imprisoned by the estranging sea.

The Extraordinary Thing that Happens a Hundred Miles from Yorkshire

To realise what a difference this means, let us glance at a romantic comparison. In the middle of the North Sea, a hundred miles from the coast of Yorkshire, lies the Dogger Bank. It is a great submerged sandbank, 170 miles long and 60 miles wide, lying from fifty to a hundred feet beneath the water. Within the last few years scientific fishermen, discovering that baby plaice grow better amid the teeming food supplies of the Dogger Bank than in our in-shore waters, have been catching and taking them from the coast to this bank, putting the little fishes out to nurse in the



THE HAPPY SCOTTISH LASSIES BRING IN THE HARVEST OF THE SEA

North Sea as we put children of the unhealthy slums out to nurse in the country. They carry them out in tanks on trawlers because the little fishes are unable to get there by their own efforts; the intervening water is too deep. So little fishes that cannot swim through the deeps are carried like dwellers on land. Now when, at a later stage, the fishermen let down their trawl nets to bring up the fully grown plaice, they bring up not only fat young plaice but bones—the remains of lions and

elephants, wolves and tigers. They are the remains of the animals that roamed the dry land long before the North Sea was born. Before the coming of the North Sea they could reach our land on foot; but, because the deep sea has broken in and possessed the valley, we now have to carry the little fishes to what was at that time pasture for wild cattle and jungle for the flesh-eaters that preyed upon them.

Once the valley was formed and the North Sea had taken possession of it, there

THE ANIMALS THAT WALKED TO ENGLAND IN THE



AN ARTIST'S CONCEPTION OF THE PROCESSION OF THE FIRST INHABITANTS OF ENGLAND WALKING
Among the animals shown on these pages are the Fox, Wolf, Bear, Cave-Bear, Striped Hyena, Sabre-Toothed Tiger, Lion,
Deer, Elk, Gazelle, Beaver, Hart, Stoat,

DAYS BEFORE THE NORTH SEA FILLED ITS BED

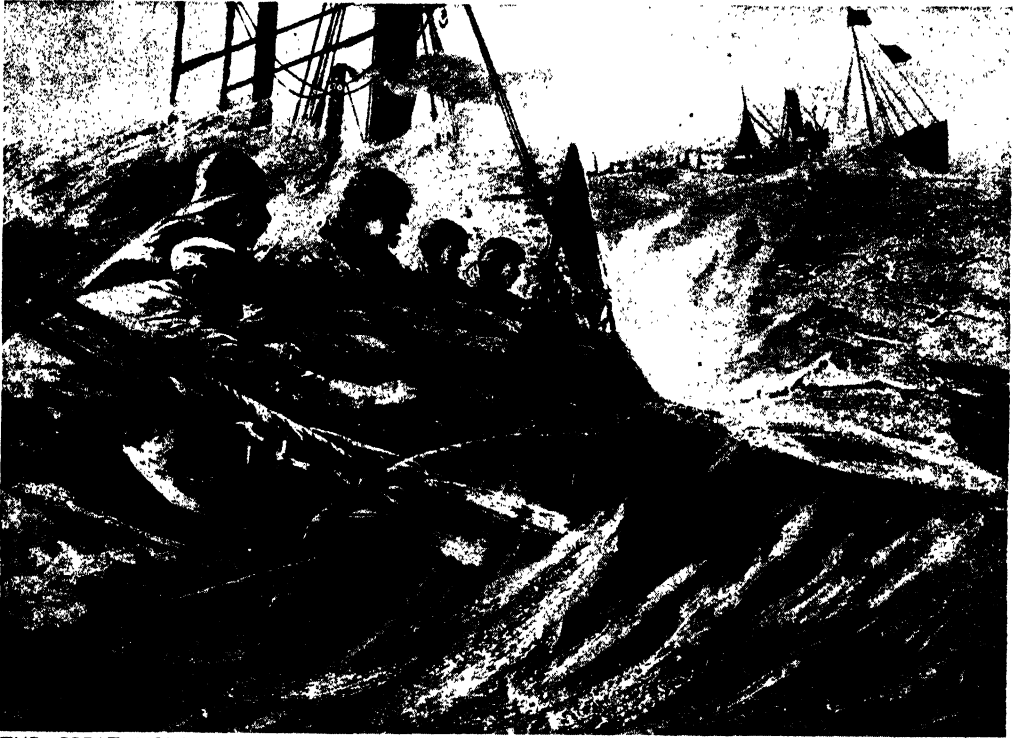


ACROSS THE NORTH SEA BED WHILE THESE ISLANDS WERE STILL PART OF THE CONTINENT
Leopard, Wild Cat, Elephant, Mammoth, Rhinoceros, Woolly Rhinoceros, Horse, Hippopotamus, Giant Pig, Wild Boar,
Weasel, Rat, Field-Mouse, Aurochs, Reindeer.

THE CHILDREN'S TREASURE HOUSE

was to be no more coming or going by land ; only mariners could approach or escape. And a race of mariners did arise. The Celts thrust out from Europe across the waters in their little boats, and reached by sea the land their forerunners had reached on foot. The Celts came over the waters and dispossessed the Neolithic men, the new workers with stone tools, and the Celts are with us still. They conquered the older men, and 3000 or 4000 years after they had built Stonehenge they themselves were conquered by the Romans. After the

scholars of classical times taught that our northern islands were the end of that portion of the world lying to the north ; that beyond that point lay impenetrable ice-ooze and demons of the void. In the opposite direction, they thought, habitable land ended at Luderitz Bay in that part of South-West Africa transferred from the German to the British Empire in the Great War. Ice and demons to the north—fire and more demons to the south ; that was their idea. The Norsemen believed in demons, but did not fear them. They



THE GREAT HOUR OF THE FISHERMAN'S DAY—HAULING IN THE NET, HEAVY-WEIGHTED WITH THOUSANDS OF FISH FROM THE FLOOR OF THE NORTH SEA

Romans came the Saxons, then the Vikings and the Danes—all across the North Sea. The North Sea made England an island, but it made the Vikings also. Its waters wash the shores of England and Scotland, of Norway, Denmark, Germany, Holland, and Belgium, and the very peril and horror of the tempestuous waters were a challenge and delight to these splendid Vikings. Carthage and Rome had shown the value of sea power, but not as the Vikings showed it in the North Sea.

They were the first great explorers of the West. We all know the North Sea today, but in their time it was an unplumbed void of mystery. The great

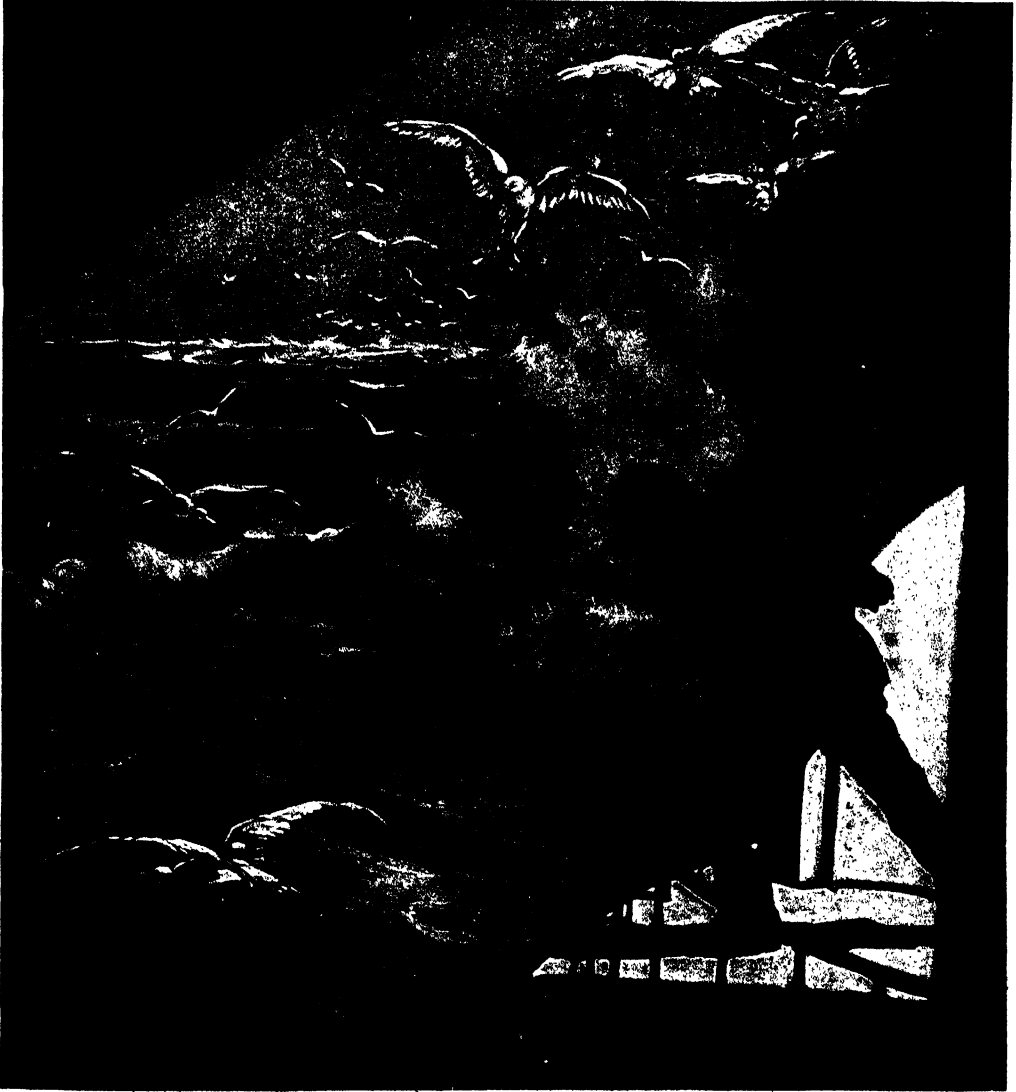
explored the North Sea and planted colonies far north of where land was supposed to end and ice-ooze and ogres to begin. Today we know every shoal, sand-bank, and submerged rock ; but in those times a night in the North Sea, out of sight of land, was a prime adventure, ranking, in the days before the compass, with the great emprise of Columbus.

There never were such men as these. They scorned the soft delights of summer sailings in sunny climes. They put out boldly for our islands, for the Shetlands and the Hebrides, for England, for Greenland farther north, for America itself. These men, trained to daring and

THE SEA THAT MADE OLD ENGLAND

adventure by the rough usage of the North Sea, discovered and landed in America 500 years before Columbus was born. They peopled Iceland, and their descendants are there now. They ravaged all Europe, sacked Paris, and reached Constantinople; they snatched a province of France, calling

which all terrors had come. Alfred witnessed the arrival of the bold rovers in their high sea galleons with their thirty pairs of oars. He saw London lying an uninhabited wilderness, devastated during his father's reign by these appalling warriors from over the sea. He beat them



"WATCHMAN, WHAT OF THE NIGHT?"

the land Normandy and themselves Normans. It was these our great Alfred fought; and it was by these men, under the Conqueror, that Harold, the last of our Saxon kings, was conquered.

Alfred was the first English king to realise the value of the North Sea as a highway and as a rampart of defence. To England the sea had been an avenue by

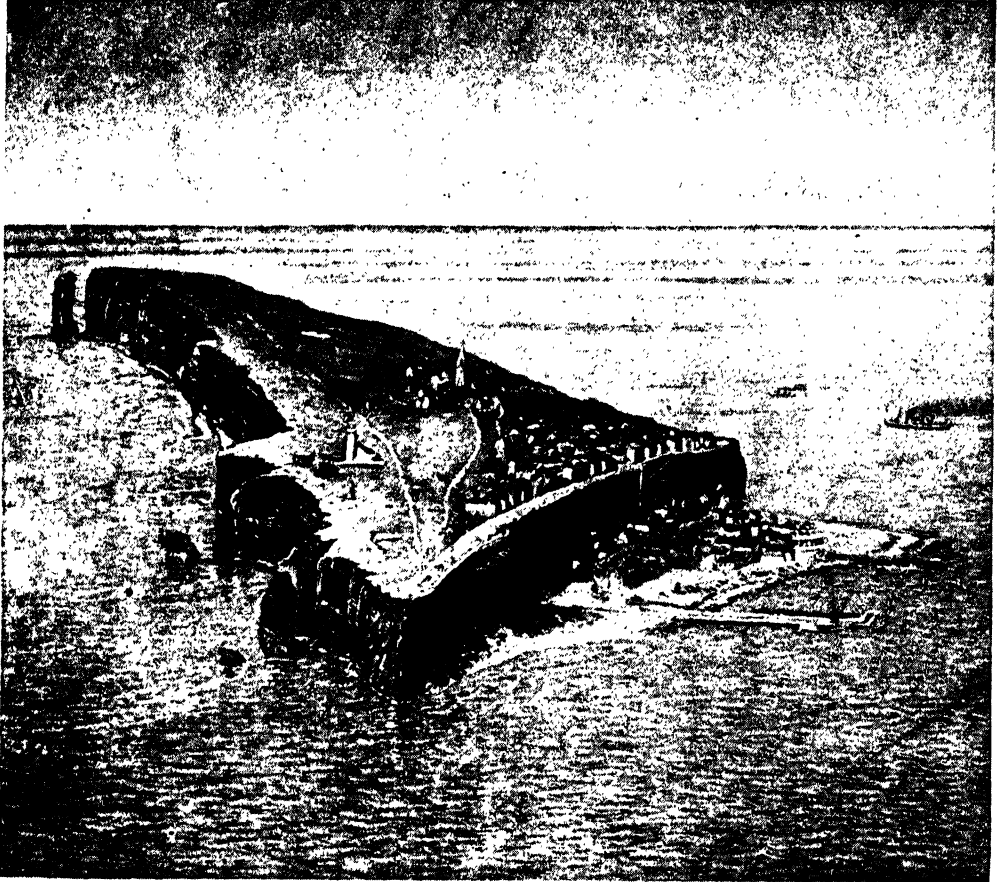
and was beaten by them, but he fought again with unconquerable courage, and he triumphed in the end. He was the first English king to grasp the meaning of the North Sea. He said, as Drake said afterwards, as Nelson said, "The place to meet the enemy is on the open sea, in his own waters, anywhere, everywhere, except in our own ports." The sea which had first

THE CHILDREN'S TREASURE HOUSE

shut up her people, like sailors marooned, brought unending streams of terrible enemies to England's undefended ports. The Vikings actually sailed their war-galleons up the River Lea in an attack on London. Alfred waited for them as he waited for their armies, got to rearward of them, built up the river behind them, fought and vanquished them, and captured all their fleet in the little dammed-up river

made us mistress of an Empire washed, not merely by the North Sea, but by every ocean. Alfred was our first great Islander.

The North Sea had flowed down its time-worn valley and made us an island. Alfred had seen in its waters the great destinies of our race. It shut us up and gave us age after age in which to develop in safety and seclusion. It has closed the doors of invasion against our enemies for the last



HELIGOLAND, THE ISLAND AT THE GERMAN GATE OF THE NORTH SEA, GIVEN BY GREAT BRITAIN TO GERMANY, AND FORTIFIED BY HER AS A NAVAL BASE IN THE GREAT WAR

which still runs into the Thames at Blackwall. He was our first sea king, our first naval commander, our first great law-giver, the first man upon whose mind there dawned the mighty conception of England as a nation, a nation of islanders not to be overrun as were the minor peoples on the coastal fringes of the Continent.

That was the mighty secret of our rise. The sea was a natural rampart to keep back invading hordes, if we would use it aright. Alfred gave us a lesson, and set us an example which, slowly acted upon, has

nine centuries; it has opened wide to us the doors of Empire. It gave us access by ship to all lands. It gave us a food supply such as the whole world cannot match elsewhere.

We often think, perhaps, that the tropical seas are the home of the most luxuriant life, and in some respects they are. They produce the finest corals and sponges, the strangest fish, the poisonous fishes, and the most poisonous serpents in the world. But for birds and food-fishes there is no place like the North Sea. There we have salmon, turbot, plaice, soles, gurnards, mullets, cod,

ALL'S WELL IN THE NORTH SEA



THE LOOK-OUT From the painting by Mr. Henry S. Tuke, R.A.

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eels, mackerel, herrings, sprats, ling, hake, halibut, whiting, haddock, crabs, lobsters, prawns, shrimps, oysters, cockles, mussels—in fact, almost every creature of the sea that comes to table; all of them in numbers defying calculation. Here, if anywhere, the people of the sea obey the great command to "be fruitful and multiply." No one can count the North Sea fish themselves, but we know the rate at which they multiply. A full-sized ling will produce nine million eggs in a year; a turbot lays the same number; an adult sea-trout produces a

hover over the oyster-beds, cut open the oysters with their file-like tongues, and eat the unhappy inmates. Starfishes, with their innocent-looking limbs, straddle the same unfortunate shellfish, pull open his fortress, and eat him. Millions of little crabs and starfishes, floating as free-swimming larvæ in that mighty mass of animal and vegetable life which we call plankton, fall victims daily to the appetite of bigger fish. "Eat or be eaten" is the law of our North Sea, as of all other seas; it is the law of the waters. Those that escape con-



NIGHT ON THE DOGGER BANK—THE FISHING BOATS YIELD UP THEIR HARVEST FOR THE MARKET

thousand eggs for every pound of its weight. Even the little whiting, which comes to table with its tail tucked coily in its mouth, lays 300,000 eggs a year, and, if left unchecked, becomes so incalculably numerous that it will ascend our tidal rivers and eat up other fish. Whales come swaggering down our North Sea waters; dolphins and porpoises play off our coasts, take serious liberties with the lordly salmon, and get almost smothered by the herring shoals into which they venture for a dinner. Unwary seals come gliding in the wake of our table fish; and, to give a spice of danger to seaside holidays, the awful shark occasionally appears.

Dark tragedies go on from day to day within sight of our coast. Giant wheelks

sumption by their own kind run the risk of capture by our fishermen.

And the capturing of fish has had an immensely important part in building up the nation shut up in the North Sea's land. The quest of fish made our men hardy and daring at sea, the men who, not content with the product of their own seas, rowed and sailed their undecked craft across the Atlantic to Newfoundland, and there laid the foundation-stone of the British Empire. Two of the most valuable sons of the Empire are among the unnamed—the man who discovered the way to "cure" fish, and so provide a food all the year round for home consumption and for stocking the ships of our mariners; and the man who discovered that lemon-juice is a sure specific against

LIFE ON A NORTH SEA FISHING BOAT



THE FISHERMEN SAFE IN PORT—MENDING THEIR NETS IN THE MORNING



THE FISHERMAN OUT AT SEA—THE WAVES DASHING OVER THE TRAWLER'S DECK

THE GOSSIPERS—NOW AND THEN BY THE NORTH SEA



THE BAIT-GATHERERS ON THE SHORES OF THE NORTH SEA

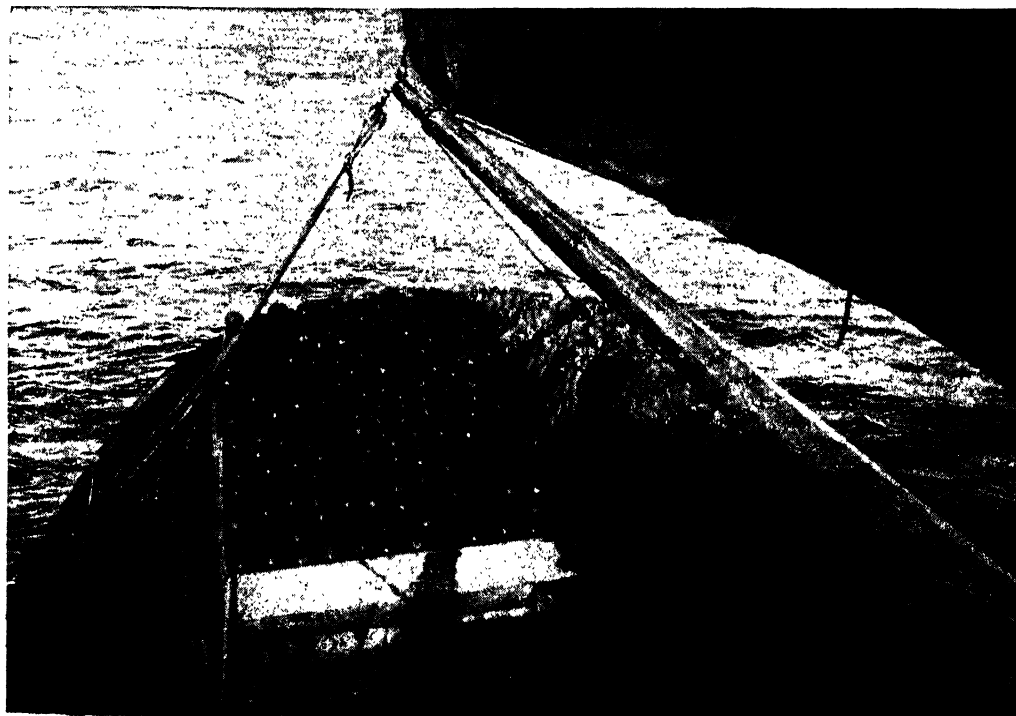


TALES OF OTHER DAYS—A SMUGGLERS' KITCHEN BY THE NORTH SEA

FROM THE NORTH SEA TO THE BREAKFAST TABLE



THE FISH AS THEY COME INTO HARBOUR



THE FISHING NET AS IT LIES IN THE BOAT

The photographs in this article are by Messrs. H. Jenkins, E. Wilson, and F. M. Sutcliffe.

THE CHILDREN'S TREASURE HOUSE

scurvy, that deadly scourge of the mariner long at sea. Smoked herrings caught in the North sea, lemon-juice to keep men healthy when afloat in their little ships—these are two of the great little factors in the building of the British Empire.

But the North Sea is not simply the fisherman's preserve. Think of the amazing variety of commerce which its turbulent bosom bears. The stately liners that glide from the Continent across its waters are but a tithe of its peaceful argosies. Smoking colliers steam down from north to south with their cargoes of old King Coal; little ships take barrels of salted herrings to Scandinavia and come back with precious ores for our steel, with pulp from the forests to make into paper, with butter and eggs from the Vikings' farms. They bring us the fine products of French industry, the nuts and oranges and onions and minerals of Spain; they come tumbling home from the East with their figs and oil, their tea and coffee, and with the very same sort of spices which set brave Diaz and Magellan to seek

a sea pathway to the East. Commerce comes round from the West into the North Sea; it comes round from the East. It brings us the fruits of sunny Australia; it brings us the ponies of Iceland. It is the greatest commercial highway in the world today, as it was in Queen Elizabeth's glorious days.

Now, the men who braved the perils of the North Sea in quest of trade braved it again in quest of Spanish galleons. Long before the great Armada came we had been, irregularly, at war with Spain, and it was our buccaneers, our privateersmen, our Hawkinses and Drakes and other splendid pirates, who kept the enemy from invading our land when we could not afford a proper Navy.

But the North Sea had raised up other daring sea-dogs in the Dutch, who fought us for years for the supremacy of the ocean. They were on a little low-lying portion of

the European western seaboard, as we might have been had not the North Sea cut us off from it. They were sailors and colonisers, and fought us for trade and dominion. Many a sore buffeting they gave us in many a battle in the North Sea waters before we finally drove them from the seas. The sovereignty of India was won in the North Sea; the sea power of Spain was broken in the same waters. We went farther south, beyond the confines of the North Sea, to beat Napoleon at Trafalgar, but that battle was only the culminating act in a great protracted drama in which the North Sea, with Copenhagen as its most tremendous fight, had all along been figuring.

Such little ships we had even then to win these world-shaking battles! Admiral Collingwood reported that "we have been sailing for the last six months with only a sheet of copper between us and eternity." Nelson's flagship had a hundred little guns, but had they all fired together their weight of metal would have been only half as great

as a single shell from the Queen Elizabeth.

Our Trafalgar ships were like the North Sea in which they had been born and tested—small, but terrible. The men who manned them were mainly fishermen, doughty smugglers, men who had been engaged, like Drake, in the coasting trade, and, like Captain Cook, in coal-carrying. They were the finest sailors any nation had ever had, and their equal can be found only in the British Fleet of today, where their descendants keep watch and ward over the North Sea which they guarded.

Many a chapter pulsing with the romance of daring and heroism has been furnished by the North Sea, but the actors have not always been the fighters. The men who live lonely lives on storm-tossed anchored ships, or in the dizzy towers of lighthouses, to mark the way for benighted mariners, have a thrilling part in the North Sea's story. It may sound simple enough to



HAULING UP

THE SEA THAT MADE OLD ENGLAND

kindle a seaward light at night and put it out in the morning, but the lamplighters are often shut up in reeling towers built out on storm-swept rocks in the sea, far from human intercourse when waves run high and winds are strong. It is no uncommon thing for the lighthouse keepers to be prisoners for six weeks or two months at a time on occasions such as these. Once one of the two men in the Eddystone Lighthouse died during a storm. The survivor, hoping that help might come, kept the body of his dead comrade in the lighthouse. But the storm raged, and it was a month before the waves subsided and allowed him to escape and tell his gruesome story.

Since then three men have always been on duty in isolated lighthouses, and three are not too many, as the story of the Flannan Lighthouse, off the Hebrides, reminds us. Twelve years ago the three men of the Flannan disappeared. Those who watched from land noticed that the light was obscured, and they attributed it to the rough weather. But the sky grew clear and the waves ceased to break over the lantern, and still no light shone. Eleven days passed before the watchers could safely approach the lighthouse in their boats. Not a trace of the three keepers could they find. Two hundred feet below the summit of the rock is a niche in which the men stowed their ropes and implements. High as is this niche above the sea, the storm-waves wash over it, and it is thought that, when the three men saw their instru-

ments and property in danger, they went down to secure them. They went down, it is thought, to their doom.

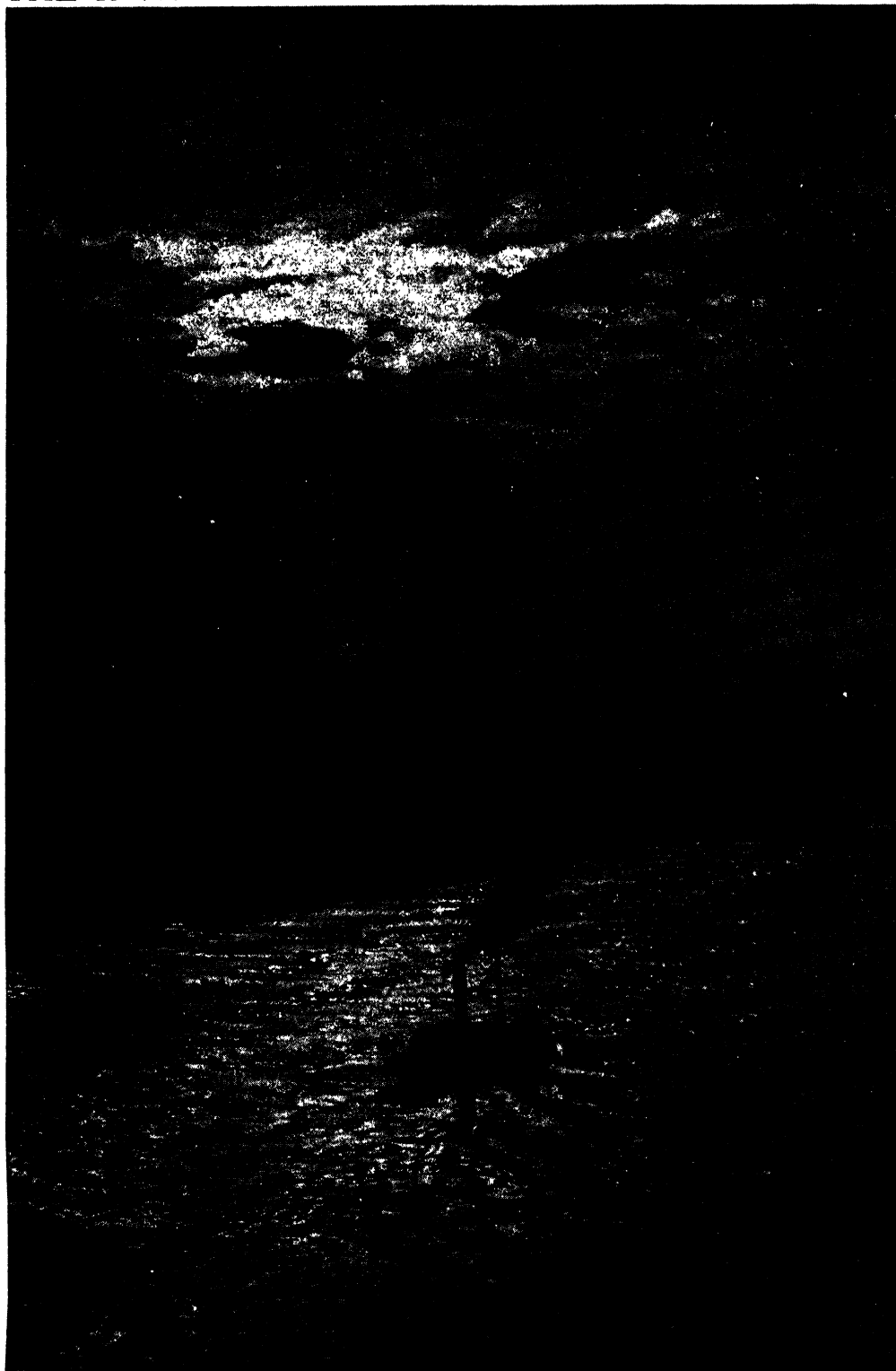
The wireless telegraph has come to aid the lighthouse man, so that he can at least communicate with shore even if he cannot reach it. Wireless telegraphy has indeed made many differences to us since Nelson's day. But it is only one of several things that have come to pass to alter the conditions which he mastered. In a sense we have ceased to be an island. When our valley was formed and filled with water we were safe from invasion except from men who came in boats; and, as Alfred and Queen Elizabeth showed, we could prevent these from coming in by going out against them. But since the North Sea shaped our fate another element has been conquered. There are pathways through the air to our England now. But the old North Sea is still there as our guardian, a terror to enemy airmen, ready with grim arms to clasp him clammily if his engine fails; and many a wreathing mist goes up from the surface of this sea to make an airman dread this new highway.

And so the North Sea is our great friend still. It carved our Motherland and gave her means to guard herself from foes without; it called into being an incomparable race of mariners and warriors and hardened them to peril and adventure. It provides us with abundant food, it brings us the most abused but really the best of climates. To our enemies a barrier, to us it remains bulwark and a highway.



A STEAM TRAWLER IN THE NORTH SEA

THE RIVER HOME OF OUR MIGHTY IRONCLADS



THE TYNE BY NIGHT—THE GREAT RIVER WHICH SENDS OUT TO SEA OUR MIGHTY BATTLESHIPS AND
RUNS THROUGH MILES OF FACTORIES AND MINES

THE RIVERS OF OUR MOTHERLAND

NOWHERE can the wonderful difference between knowledge that comes from dull books and the knowledge that comes direct from life be more clearly seen than in a boy's thoughts about rivers and the thoughts on the subject of a man who has travelled widely. To the boy, rivers are only names on a map that easily slip from his memory. To the traveller—boy or man—rivers are lovely living things, haunted by romance along each "reach" of them, from their fountain-heads, hidden in the hills, to their passage, by the last bar of shingle, into the salt sea.

The name of a river that paints no pictures in the mind is just a dry husk of fact. But when we know a river it becomes a personality, like a human friend, or like an animal we love. A mountain has the same effect, speaking to us with a voice of its own, but it has not the familiar voice of a river. Men have always thought of each river as having a personal character.

Said Tweed to Till :
" What makes you run so still ? "
Said Till to Tweed :
" Though you run with speed,
And I run slow,
Where you drown one man
I drown two."

There we have contrasted rivers—the one cheerful, open, and honest ; the other sly and treacherous. And many rivers vary like that when you know them. The understanding traveller feels all the while he is passing through any country how it is moulded by its rivers. He traces his journey by the panting of the engine of his train as it passes over the watersheds from one river basin to another.

If he is coming into England by the way our Saxon forefathers came, and has left Southampton behind and passed ancient Winchester, and the engine begins to labour heavily and slacken its pace, " Yes," thinks he, " we are now climbing out of the

valley worn by the Itchin." Then a tunnel or two are reached near the summit of the watershed, and the speed quickens fast. " Now," he thinks, " we are rushing into the basin of the Thames, through the side valley of the River Wey."

And so, along every railway line, in England or Europe, if you notice the beat of the engine, now toilsome, now swift and easy, you may judge where you are, rising or falling with the water-worn land from river-bed over into river-bed. Everywhere the waters, through unnumbered years, have moulded the land, and prepared the sites where towns may be built. Indeed, it is the rivers that have drawn, on the vast face of the earth, all the inland maps, and have helped the sea to shape the coastlines.

If we wish to know our native land we cannot begin better than by studying the individualities of her chief rivers. They will introduce us to her beauty, her history, her industries, and her commerce.

Even in such a limited space as the British Islands rivers vary widely in character. Some rush down hastily to the sea, from lofty sources, through scenes of wild beauty, but are of little use, for few of our hills are so steep as to enable their waters to be used for generating electricity. Others cut a deep channel that only carries off waste waters, and carries them off faster than is good for the land. The swift, deeply channelled stream is seldom fit for navigation or irrigation. Some, with a moderate steepness, leave part of their waters behind for use in mill-ponds and reservoirs ; generally such streams are endeared to us by a union of helpfulness, romance, and natural beauty. Others spread broadly and lazily over fertile plains, in quietness and dignity, while on their banks cluster towns notable for industry, or the marketing of the earth's products grown from the soil

THE CHILDREN'S TREASURE HOUSE

the stream brought down ages ago. Often these streams expand into estuaries as they approach the sea, cutting channels through muddy flats, and admitting sea-going ships far up into the land. In such cases it is not easy to say where the river ends and the sea begins. Some rivers have only a main channel fed by small rivulets from hills near at hand, while others receive a majestic retinue of tributary waters, and so make a final drainage bed for the rainfall and springs of a wide region. Some have long been channels for human activity, and are rich with historical memories, while others pass through lands that in distant times were comparatively empty, or never caught the attention of the world. The names of some have resounded through the world in song and story, while others are unknown to fame.

Which of these varied features must be included in a river we may call "great"? Must we think of the river's length as of much importance? Or must we consider first the extent of country it drains? How far do the towns on its banks give it a distinction? Or is a river's place among rivers determined by its

volume of peaceful waters securely floating downward the produce of inland industry, and floating upward, on its tidal visitations, the commerce of the world?

The answer is that the stream comes first which unites in itself the greatest number of the features we have named. If that be so, which is the greatest river in the British Islands, the princeliest flow, judged by its waters, its traffic, and the life that congregates on its banks because the river is there?

Putting aside local feeling that might make Scotland suggest the Clyde, Liverpool the Mersey, and Northumberland the Tyne—the river of rivers to all Northumbrians—we only admit three competitors for the first place. The Shannon—250 miles long—the Severn, and the Thames take

that order if length be the test; while if area of drainage be the test the order is: Severn, with 6850 square miles; Thames, with 5924 square miles; and Shannon, with 4544 square miles. But the Shannon, which, we see, has lost in area the place it gained by length, is further outclassed by the fact that it drains a comparatively poor district, with only one large town on its course—Limerick.

What, then, of the Severn and the Thames? On every point of importance the pre-eminence must be allowed to the Thames. In length, measuring the Thames from its source to the Nore, and the Severn from its source to Avonmouth, there is little difference; and in area the Thames basin is the larger, unless the Bristol Avon and the Wye be regarded as tributaries of the Severn, which they enter exactly where

it ends and merges in the Bristol Channel. Between Avonmouth and Gloucester on the Severn there is a 44-mile course of tidal estuary beset with sands, and made dangerous by the inrush of a lofty tidal bore, so that a canal has been cut for more than one-third of the distance to avoid the difficulties of



THE RISE OF THE THAMES IN THE COTSWOLD HILLS

navigation. Even so the trade of the river is not large, unless Bristol be credited to the Severn, and Bristol is emphatically on a water system—that of the Avon—coming from the south-east and having no association with the Severn except at a single point of muddy juncture in the presence of the sea. The Severn is a noble river, shining across the western plain to Tewkesbury between the Malvern Hills and the Cotswold Hills, but it makes a hampered exit to the sea, and can never be a great, continuous artery of commerce. With no similar disadvantage, the Thames holds a proud pre-eminence.

In the Thames unite all the best characteristics of rivers that do not flow through mountainous country, and so it may be followed as an illustration in some detail.

THE RIVERS OUR IMMORTAL MEN HAVE LOVED



THE RIVER AVON THAT SHAKESPEARE LOVED, THAT "MAKES SWEET MUSIC WITH THE ENAMELLED STONES"



THE LITTLE CHERWELL RIVER, WHICH BRINGS THE WATERS OF THE EDGE HILLS, IN WARWICKSHIRE, INTO THE THAMES AT OXFORD

THE CHILDREN'S TREASURE HOUSE

Rising as the Isis 350 feet above the sea, at Thames Head, in the Cotswold Hills—or 700 feet if the little River Churn, its longest early tributary from the Cotswolds, be taken as the true source—it makes no wild downward dash from mountain to plain. Indeed, by the aid of forty seven locks, it is navigable for more than 190 miles of its lower course. Its journey is almost wholly peaceful, with lazy windings past low hills, often pleasantly wooded, till the broader lower valley is reached.

But this gentle and familiar stream, only 50 yards wide at Oxford, 50 miles below its source, and 250 yards wide at London Bridge, 48 miles above its outlet into the sea at the Nore, is undoubtedly one of the world's great rivers. Historically, it is great if England is great, for its course has been one of the chief a series of English history. It has held its present name, we know, for two thousand years. It was called the Thames by the British when the Roman legions first broke a way to it through the forests of the south. Oxford, Windsor, Westminster, St. Paul's, the Tower, Tilbury, and the Parliament Houses are on its banks. Let us take a trip down this impressive stream.

A Ride in a Boat from a Wiltshire Village Up to London Bridge

Except in dry weather, one may row down the river from Cricklade, a Wiltshire town about seven miles from the source, to London Bridge, where comfortable rowing ends, but the journey is better begun at Lechlade, in Gloucestershire, about ten miles below Cricklade. Even to this infant part of the Thames five streams contribute. Besides the parent flow from Thames Head, the Cotswold; send down the Churn, the Coln, and the Leach, while the Wiltshire Hills of the White Horse send the Cole. Also above Lechlade the river has been linked to the canal system of the country, first with the Severn, and then, through Stroud, with the basin of the Bristol Avon.

A winding course of over thirty pleasant miles, down to Oxford, passes between the Gloucestershire Cotswolds and the White Horse Hills of Berkshire, but the Cotswolds continue to act as the chief feeder. First they despatch the Windrush, and then the Evenlode. At Oxford the Cherwell brings in the waters of the Warwickshire Edge Hills and of the Buckinghamshire Chilterns. A few miles above Oxford a branch of the river turns aside to join the Oxford Canal, which leads away far northward to Warwickshire and the manufacturing Midlands.

It is impossible to imagine Oxford without the Thames. The High Street, the grey college quadrangles, the monumental schools, libraries, and museums, are not more a part of the most glorious of provincial cities than its "brimming" river, the home of sport and cultured loitering. Anyone who has only visited Oxford when the river has been in flood, obliterating its own course and the meadows and playing fields, has not yet seen "the city where the Muses all have sung," for the river and its life are essential ingredients in the unrivalled charm of the university town.

The Beautiful Sweep of the Thames Past the Chiltern Hills

From Oxford the Thames turns to the southward, and after receiving the waters of the Ock from the Berkshire White Horse Hills, and the Thame from the Chiltern Hills, passes between the ranges, by a gap it made when it was a larger river in prehistoric times, and, resuming its eastern course, reaches Reading, where the Kennet brings to it the waters of the North Downs.

The most beautiful part of the river's course is its sweep past the southern foothills of the Chiltern range, from Goring by Pangbourne, and again from Sonning by Henley and Marlow to Maidenhead. When people think of the dreamy beauty of shining waters gliding sweetly through woodlands, the pictures that live in the minds of multitudes are of this lovely part of the Thames.

At Shiplake the river Loddon brings in the rainfall of the Downs north of Basingstoke; the Colne joins the main stream from the northward at Staines, after Eton and Windsor have been passed; the Wey receives the waters from the Aldershot and Guildford region of the North Downs; and near Hampton Court the Mole comes from Sussex and across Surrey from Leith Hill on the one hand and Box Hill on the other.

The Point of the Thames Where the Waters of the Sea are Stopped

And now we are approaching London and leaving the Middle Thames. Downward boats stop at Kingston, and upward boats at Teddington. The river Brent brings the Middlesex waters down to Brentford, where the Thames is linked with the canal navigation of England through the Grand Junction Canal. It is not generally known that a boat or a barge can pass from the Thames, by canal and river, to the Humber or to the Mersey, to Birmingham, Manchester, Leicester, Nottingham, or Sheffield, and that such journeys are being constantly made by the floating nomads of our inland waterways.

THE RIVERS OF OUR MOTHERLAND

But we have already reached a distinctive stage in the journey of the river, for between Kingston and Brentford we meet the waters of the sea. The tide rises in the river-bed for eighteen and a half miles above London Bridge, till it is stopped by Teddington Lock. Above the lock the river is controlled. Below the lock it ebbs and flows, and navigation has no artificial interruption, except for what is known as a half-lock at Richmond, only used at low tide. Tributaries, from the north and south, continue to pour in their waters, through London itself, as the river sweeps along the very centre of the mighty city. Opposite Fulham the little

waterway. Eleven and a half million tons of shipping use the Lower Thames every year, bringing there one-seventh of the whole of the sea-borne traffic of the British Isles. Forty cities and towns of considerable size have been built either on the banks of the main stream or those of its tributaries. More than twelve thousand boats, large and small, move upon its waters, for business or pleasure. Though other British rivers may be more romantically beautiful, none can claim to show such a combination of advantages as the Royal Thames.

The chief tributaries of a specimen river, the Thames, have been named, one by one,



THE CANAL THAT LINKS UP THE THAMES WITH THE SEVERN, SO THAT A MAN CAN ROW FROM WILTSHIRE INTO LANCASHIRE. This picture, by Alfred Parsons R.A., is reproduced by courtesy of Mr. M. Ellemann.

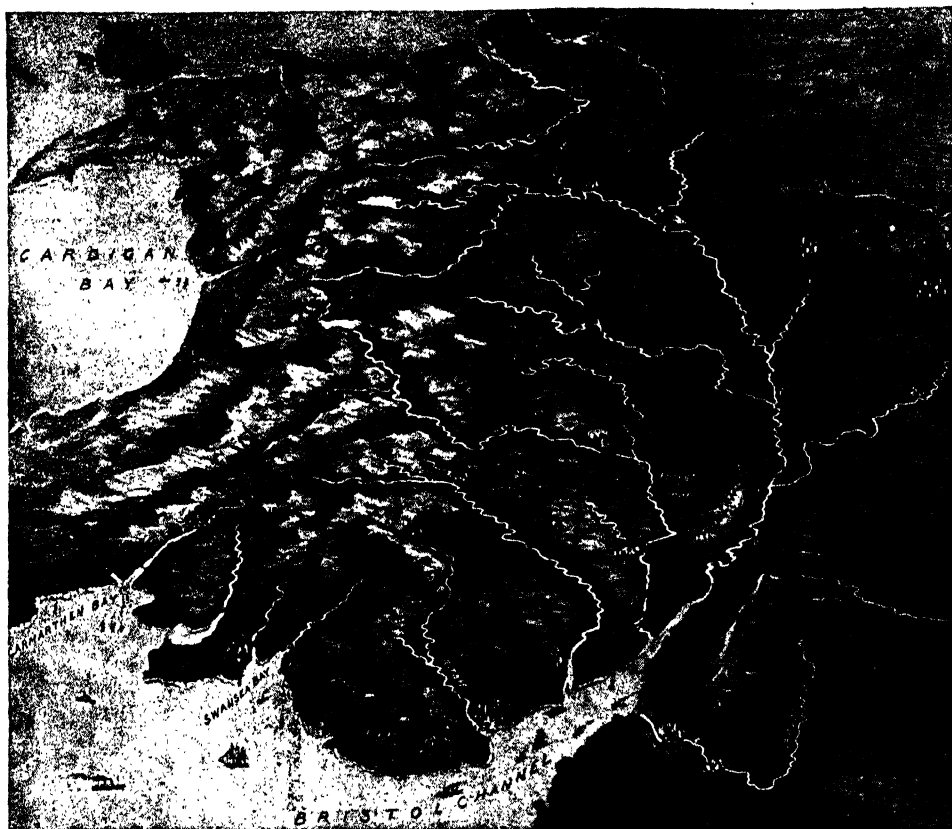
Wandle comes from Wandsworth; the Hertfordshire Lea, which has been much used for drinking purposes, ends its course at Blackwall; the Roding from Epping Forest empties opposite Plumstead; the Darent from the Kentish Downs near Erith; and, finally, the Medway pours the waters it has brought from the Kentish Weald, between the North and South Downs, into the great estuary of the river near Sheerness, where ships from all the world are floated up with every tide to the huge docks that line the waterway between Tilbury and the Tower.

The Thames bears a volume of trade far greater than that of any other British

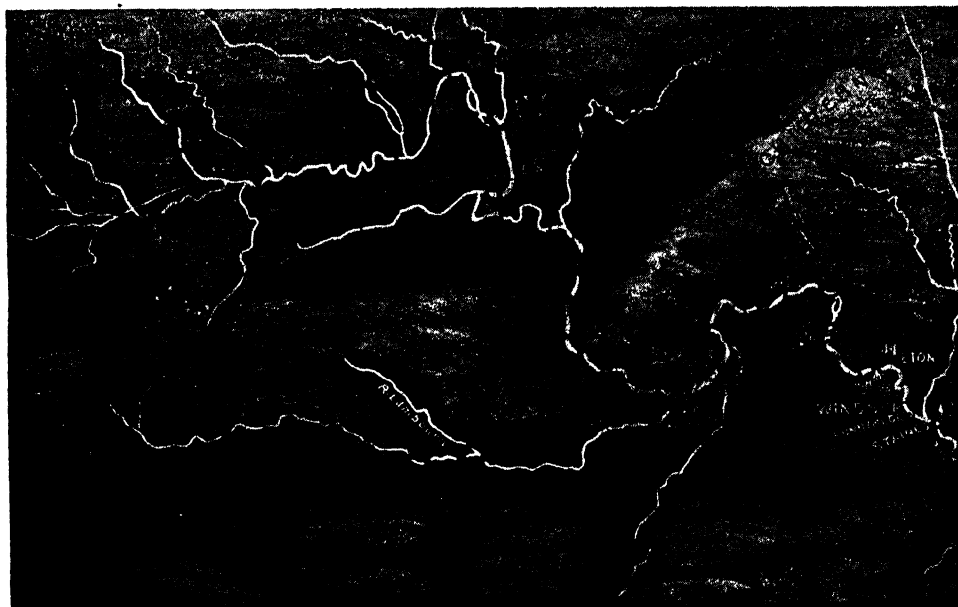
because it is only possible to form a full conception of a river by imagining all the side valleys that converge with their streams into the main valley—as branches converge on the tree, or limbs on the animal trunk—and make up, with the main stream, the total of the river's influence. This whole area of drainage is the basin of the river.

In the British Islands seventeen rivers have each a basin of a thousand square miles or more. The English rivers with a system of at least a thousand square miles are the Thames, Severn, Yorkshire Ouse, Trent, Great Ouse, Mersey, Hampshire Avon, and Tyne. The Scottish rivers drain-

THE SHINING WATERS THAT FLOW FROM AGE TO AGE

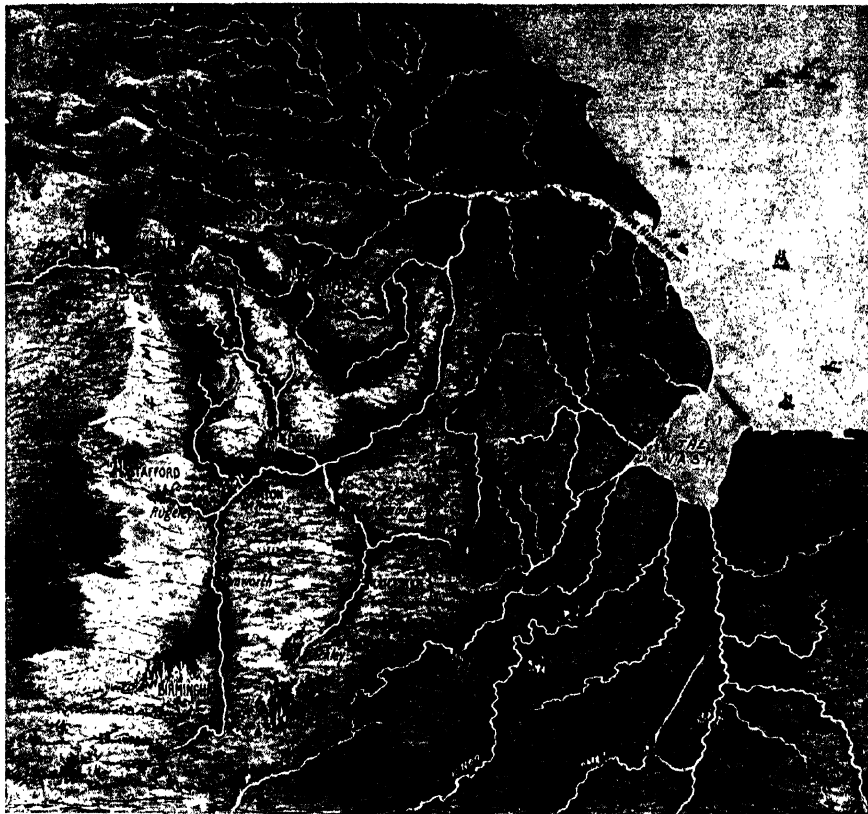


THE SEVERN, RUNNING DOWN FROM THE HILLS OF WALES INTO WESTERN ENGLAND

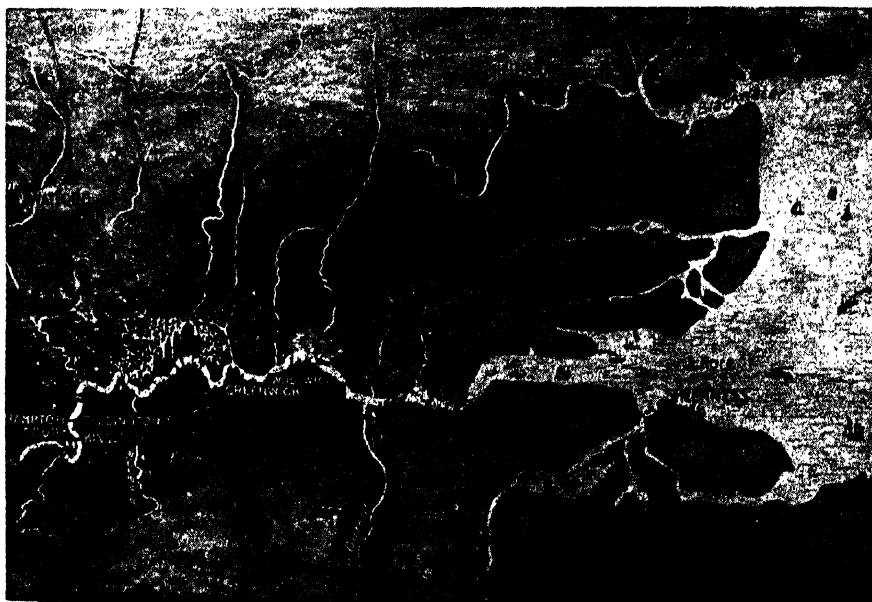


THE THAMES, THE GREATEST RIVER OF THE BRITISH ISLES, JOINED TO THE RHINE IN AGES

THROUGH THE BEAUTIFUL HOMELAND OF FREEDOM



THE YORKSHIRE OUSE AND THE MIDLAND TRENT, WITH THEIR TRIBUTARIES



LONG SINCE PAST, AND NOW THE BUSY WATERWAY OF THE GREATEST CITY ON THE EARTH

THE CHILDREN'S TREASURE HOUSE

ing that area as a minimum are the Tay, Tweed, Clyde, Spey, and Deë. The Irish rivers with thousand-mile basins are the Shannon, Barrow, Erne, and Blackwater. After a glance at these larger rivers, some smaller streams must also be mentioned.

The River that Pours Water Into the Homes of a Mighty City

The drawbacks of the lower course of the Severn have already been referred to, but throughout its upper and middle courses it is an attractive river. Two thousand feet high, on the spongy sheepwalk of Plynlimmon, it begins, and, falling swiftly, with a northward course, enters the little Vale of Powis, and serves the manufacturing towns of Newtown and Welshpool. Blankets, flannel, tweeds, and woollen shawls are the goods made in this remote Welsh valley.

On the very frontier of Wales, just as the river is beginning a southward turn to the ancient and picturesque town of Shrewsbury, it receives the waters of the River Vyrnwy, the overflow of the great artificial Lake Vyrnwy, made by the city of Liverpool for a water supply. The lake, twelve miles round, sends down to Liverpool, seventy miles away, forty million gallons of water a day, besides keeping up the full flow through the Vyrnwy river into the Severn. This is done by impounding the flood-water, which otherwise would rush away uselessly.

Below Shrewsbury the Severn traverses the Shropshire coalfield between the Cleve Hills and the Clent Hills, through scenery that is often charmingly wooded, and so reaches the fine old cathedral city of Worcester, noted for centuries for its manufacture of porcelain and of gloves. Below Worcester it receives the River Teme, which has come down from the nobly castled Shropshire town of Ludlow; and by Tewkesbury, a quaint town just over the Gloucestershire border, with a glorious old abbey, is the junction with the Warwickshire Avon.

The Water that Flows by Shakespeare's Home and Cromwell's Battleground

Of eight British rivers named Avon this is the one that lives dearest in men's hearts. Romance attends its whole journey, for it takes its rise by the battleground of Naseby, in Northamptonshire, and, bordering Leicestershire, receives the Swift, into which, at Lutterworth, the ashes of John Wycliffe's bones were cast. Passing Rugby, where so many fine men have been schooled, it reaches Warwick, gliding under the very walls of its towering castle, and so on to Shakespeare's Stratford, and the lovely

Worcestershire fruit-growing vale of Eve-sham. Who can doubt this was the stream Shakespeare had in mind as "the current that with gentle murmur glides," and that
Makes sweet music with the enamelled stones,
Giving a gentle kiss to every sedge
He overtaketh in his pilgrimage.

The exquisite River Wye can only be doubtfully claimed as a tributary of the Severn, and the Bristol Avon unquestionably is an independent river, reaching the sea simultaneously with the larger stream. This Avon circles round the southern slopes of the Cotswolds, touching the district of the broadcloth trade (Bradford and Trowbridge), and then cuts a deep valley, descended by locks, to the palatial little city of Bath, and the fine, old, picturesque, but energetic river-port of Bristol.

The Wye is a river known to the world almost solely by its beauty. But little of it is navigable except for pleasure. Like the Severn, the Wye rises on Plynlimmon, and, like the Severn, its tributaries, before it leaves the mountains, provide a water supply for a great city. Birmingham's colossal dam holds up the Elan and Claerwen valleys in Radnorshire, which empty naturally into the Wye below Rhayader.

The Lovely Scenery of the Wye that is Famous Everywhere

Here the river begins to make the first of two lovely stretches of scenery, famous throughout the world. This upper paradise of the Wye ends below Hay, as the stream leaves the hills, and crosses the rich red plain of Herefordshire to the cathedral city; but before it can reach the sea it has to thread a narrow, winding, rocky valley clad with woods between the hills of the Forest of Dean and the border heights of Monmouthshire, and here from Kerne Bridge by Symonds Yat to Monmouth, and by Tintern and the Wyndcliff to Chepstow, comes the second dream of sylvan and stream-lit loveliness that casts a glamour over lovers of Nature from "a' the airts the wind can blow." Only one scene in the British Isles can enter into comparison with the woodland charm of the lower Wye, and that is the Vale of Avoca, in the midst of the Wicklow Hills.

The main stream of the Yorkshire Ouse is less thought about than the succession of tributaries which join it from the many valleys of the Pennine Chain, where it also has its source. All these Yorkshire rivers have their headwaters in wild and lonely moor lands that are visited only by strong

THE RIVERS OF OUR MOTHERLAND

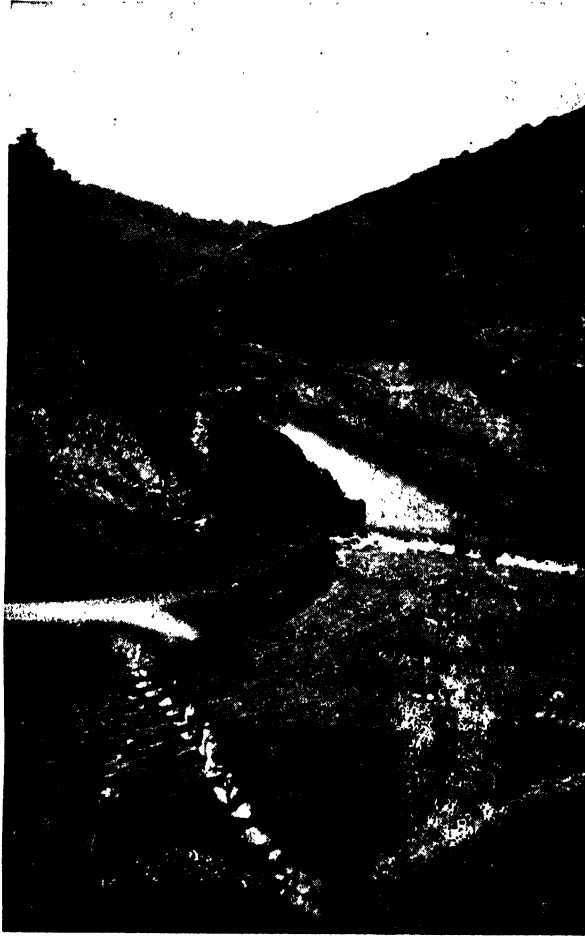
walkers who love stern scenery, and by sportsmen. The streams of central and eastern Yorkshire pass from steep and narrow valleys into grazing lands and then into well-cultivated farm lands; but the more western streams quickly reach manufacturing and mining districts, and are made foul by the liquid refuse of industrial mills.

The Ouse itself journeys almost entirely through agricultural regions. It begins with the union of the Swale, descending swiftly down the gloomy and narrow Swaledale to the rock-built stronghold of Richmond and the Ure, which has traversed the broader, gently pastoral Wensleydale. The streams merge after the Ure has passed quiet Ripon, and together, as the Ouse, slide quietly by York, and ebb and flow by Selby to the salt Humber at Goole. The eastern part of Yorkshire, south of the Cleveland Hills and west of the Wolds, drains to the Ouse through the River Derwent, a peaceful stream, tidal for fifteen miles, and navigable up

to Malton. The Ouse itself is tidal to within eight miles of York.

The River Nidd, which joins the Ouse above York, is one of the most romantic streams in the British Islands, until it has passed the quaint, castled town of Knaresborough and reached the fertile plain of York. Few strangers penetrated to the wild, bare glens where it rises on the slopes of Great Whernside, at a height of 2000 feet, until the city of Bradford impounded its waters, at a height of 1200 feet, for their drinking supply. Now a railway follows the valley nearly up to the nobly placed village of Middlesmoor. Pateley Bridge is the centre for seeing the beauties of the lower part of Niddedale—not the river, but the wooded glens (Raven's Gill) and the fantastic rocks (Brimham Rocks) that look down on the stream. Harrogate, the health-giving source of evil-smelling waters, is in the basin of the Nidd.

The Wharfe is the most constantly picturesque river of the Ouse basin. It rises deep in the



THE DOVEDALE STEPPING-STONES—CROSSING THE RIVER DOVE,
THE POUNDARY STREAM OF DERBYSHIRE AND STAFFORDSHIRE



THE CHILDREN WATCH THE SEVERN FLOW TOWARDS
WORCESTER'S BEAUTIFUL CATHEDRAL

THE CHILDREN'S TREASURE HOUSE

Pennines, between Great Whernside and Penyghent, and, broadening out its valley amid the healthy moorlands of Grassington, passes on to such a narrow, rocky gorge in the Bolton woods—"The St yd"—that an active man can leap across the chasm. Hastening past the rocky ledge of Ilkley, it crosses woodland; that in olden times were the Forest of Harewood, and so reaches the Plain of York and the Ouse near Selby. Throughout the whole of its hilly course the Wharfe is an engaging stream.

The River that Flows and Blackens Among the Mills and Mines

The Aire, on the contrary, is thoroughly workaday and offensively polluted. It rises in Malham Tarn, on Settle Fells, under the flank of Penyghent. Indeed, standing on Fountains Fell, a buttress of the craggy limestone Penyghent, one may descend direct, at equal distances, either into Wharfedale, or Airedale, or into Ribblesdale, which leads down to Preston, in Lancashire, and thence to the Irish Sea, so sharply cut is this backbone of England. The Aire almost at once plunges underground for two miles—a common occurrence for rivers in limestone countries. The Nidd does the same near Middlesmoor. At first the Aire is a brightly sparkling stream—hence its name. But it soon reaches the centres of the woollen trades, Keighley, Bingley, Shipley, Leeds, with Bradford close by, and when it has escaped mills it enters the dusty region of mines. At Castleford it receives the Calder, and it joins the Ouse immediately above Goole. The Calder, which has come from the borders of Lancashire and has passed by or near Halifax, Huddersfield, and Wakefield, is deeply stained, like the Aire, by its usefulness.

The Pretty Streams that Run Through the Yorkshire Moors

Another tributary joins the Ouse at Goole—the Don. It has had a south-eastward, hilly course along the edge of Peakland to Sheffield, and then, polluted by the trades of Sheffield, Rotherham, Barnsley, and the South Yorkshire coalfield, a lazier journey by Doncaster to the sea. The pretty moorland streams that feed the Don above Sheffield—the Sheaf, Porter, Rivelin, Loxley, and Little Don—were once the busiest examples of working waters, for they were banked up into ponds or reservoirs to turn the wheels which grind cutlery; but now they are only ornamental waters passing through public parks, or are used in the hills for

the city's water supply. The Rother, a stream which once brightly watered the forest described in Scott's "Ivanhoe," now creeps through the midst of a huge coalfield, with pit-heads and refuse banks on every hand.

In all these Yorkshire streams it is only the upper reaches, too swift and shallow for boating—except the Nidd at Knaresborough—and above the frontiers of industry, that can be known and loved.

The Trent, the great river of the Midlands, with a basin, like that of the Yorkshire Ouse, of over 4000 square miles, is a peaceable, navigable river, useful and not impure. With its tributaries it covers a wide range. Rising on Biddulph Moor, in North Staffordshire, it has fallen nine hundred feet, passing on the way the Staffordshire Potteries, before it turns eastward between Needwood Forest and Cannock Chase, and then north-eastward to Burton-on-Trent. Beyond Burton it is joined by the Dove, the beautiful boundary stream of Derbyshire and Staffordshire, and midway to Nottingham receives the Derbyshire Derwent, a swift, unnavigable stream that has come from the farthest Peakland hills through scenes of great beauty, and has passed Derby with a strong current.

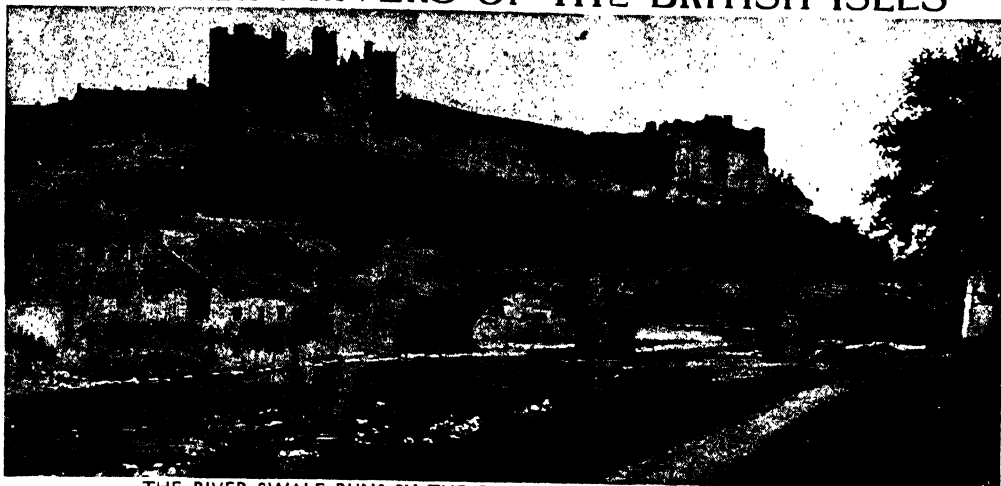
The Trent and Its Floods, and the Streams that Fishermen Love

At Trent the Soar arrives from Leicester, a full, easily flooded stream. Below Nottingham the Trent brims brightly through green pastures, and, passing Newark—an ancient castled stronghold like Nottingham—reaches Gainsborough, where the navigation is open and the tides are felt. Between Gainsborough and the Humber the scene is fen-like—that is, gloomily flat, with many drainage dykes. The Derwent, with its tributary the Wye, which rises near Buxton, and the Dove make the choicest beauty spots of central England; but there is nothing wilder than the Blacklow moors where the Derwent begins. Its upper valley is now filled with reservoirs as large as lakes, where water is stored for Sheffield, Nottingham, Derby, and Leicester.

Though itself one of the most placable of streams, the Trent is much given to floods, as is the case with all rivers that have their sources in stormy hills and their lower courses through flat meadow-lands.

Like the Swale, the Ure, the Nidd, and the Wharfe, the Derwent, Derbyshire Wye, and Dove are streams to be loved, and along their banks have wandered and pondered the thoughtful fishermen, like

NORTHERN RIVERS OF THE BRITISH ISLES



THE RIVER SWALE RUNS BY THE RUINED WALLS OF RICHMOND CASTLE



THE RIVER NIDD, THE YORKSHIRE STREAM WHICH RUSHES UNDERGROUND NEAR ITS SOURCE, PASSES THE LOVELY VILLAGE OF KNARESBOROUGH



THE VALLEY OF THE TAY, WHICH POURS MORE WATER INTO THE SEA THAN ANY OTHER RIVER IN THE BRITISH ISLES

THE CHILDREN'S TREASURE HOUSE

Izaak Walton, who have brought the craft of angling into our literature.

Though the Great Ouse has a length of 160 miles and a basin of 2600 square miles, while the Mersey is only seventy miles long, with a basin of 1600 square miles, and the Tyne eighty miles long, with a basin of 1150 square miles, both the Mersey and the Tyne must be ranked before the Great Ouse, because of the enormous sea-borne traffic which enters and leaves the country by their waters.

Most people only think of the Mersey as a great shipping harbour, but it is a charming river before it reaches the dull, flat lands of South Lancashire. If you

streams, the Etherow and the Goyt, that makes the Mersey, and sends it down to Stockport and across the flat to Liverpool, to receive yearly between nine and ten million tons of shipping from all the world for the warehouses of Liverpool and Manchester.

The Tyne is a noble river, however it is judged. It is formed by two main streams, the North and the South Tyne, with many tributaries, some of them of great beauty. The North Tyne, beginning in the Cheviots close to the Scottish border, joins first with the Rede, from Redesdale, at Redesmouth. In the days of border fighting it was down this Rede valley that the Scottish invaders preferred to enter England,

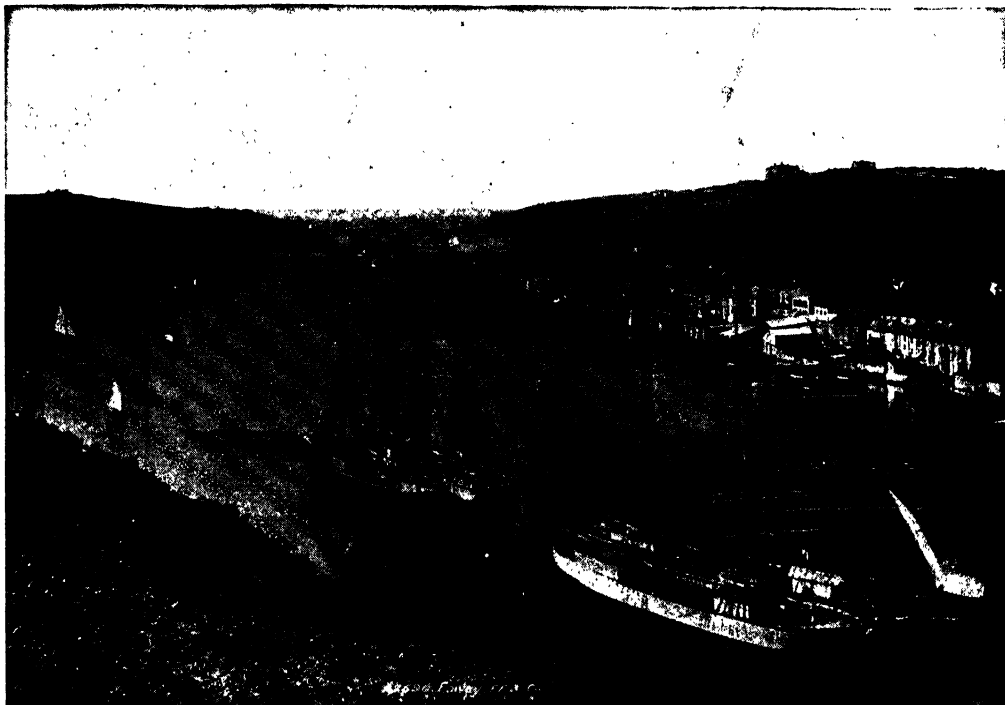


THE SILVER DART THAT WINDS ITS WAY THROUGH THE LOVELY WOODLANDS OF THE WEST COUNTRY
This picture, by John C. Adams, is reproduced by courtesy of the Hon. Richard Bethell

approach Manchester by the Great Central Railway, you skirt for a while the Peakland district alongside the great Bleaklow Moor, where the Derwent rises, and then, dashing through the Woodhead Tunnel, you emerge with surprise into a steep, narrow valley filled with reservoirs. Its name is Longden-dale, and the reservoirs belong to the city of Manchester. The little river that takes away their surplus water is the Etherow. Again, visitors to Buxton, the lofty health resort, take their finest walk along the "Hunters' Path" into the heathery, wooded valley of the Goyt. It is the union of these two merry, tumbling

and here was fought, among many frays, the battle of Chevy Chase, famous in ballad story. The South Tyne rises in the corner of Cumberland filled by the great hill Cross Fell. It first runs northward, and then eastward by the line of the ancient Roman wall, till it meets the North Tyne near Hexham, and the two pass on together to Newcastle, Shields, and the hives of industry and clusters of shipping that make the last fifteen miles of the river's bank a continuous town with varying names. The Tyneside is a land to itself, with its mines, its great works, and shipping that totals seven million tons a year.

THE LOVELY RIVERS OUR FIRST SEAMEN KNEW



FOWEY RIVER RUNS INTO THE SEA AT THE CORNISH PORT WHICH BEARS ITS NAME



THE RIVER FAL APPROACHES THE SEA THROUGH KING HARRY'S PASSAGE

The photographs illustrating this article are by Messrs. W. Lawrence, Frith, Valentine, Underwood, and the Photochrome Company.

THE CHILDREN'S TREASURE HOUSE

The Great Ouse rises in Northamptonshire, and loiters slowly through Bedfordshire, Huntingdonshire, Cambridgeshire, and Norfolk to King's Lynn and the Wash. It is seen at its best about the town of Bedford. When it reaches the Cambridgeshire Fens artificial channels are made for it.

The Hampshire Avon has a basin about equal in extent with that of the Tyne. Rising in the Wiltshire Downs, it drains Salisbury Plain, passes near Stonehenge, and through Salisbury to its mouth at the ancient town of Christchurch, where it receives the Stour. It is not navigable. Uncontaminated by the refuse of trade,

water into the sea than any other British river, but the Clyde stands easily first in industrial supremacy, with an annual shipping account of two and a half million tons. It has, too, by far the most beautiful of all British estuaries. The Spey is the swiftest of Scottish streams, and is wholly unnavigable. So also is the Dee, the river which has the most continuous beauty, but it is the Tweed which charms us most intimately with its ineffaceable romance.

The Irish Erne is a connecting current through a succession of sweet lakes; the Barrow, a many-tributaried outlet for much of south central Ireland; but the palm of



THE LOVELY IRISH BLACKWATER AS IT PASSES THE CRAGGY CASTLE ROCK OF LISMORE

the Avon is a paradise for fish, and its salmon hold the first place in the market.

Among smaller English streams mention must be made of the exquisitely wooded Teign and Dart and Looe in the West Country, the estuaries of the Fowey and the Fal, the lovely Lyn hurrying down its rocky bed from Exmoor, the Usk, which vies with its neighbour the Welsh Wye, the Lakeland Duddon, immortalised by Wordsworth, and the Rother, that gently laps the churchyard wall by the poet's grave in Grasmere.

Among Scottish rivers the Tay takes pre-eminence, because of its volume of waters drained from a basin of 2600 square miles, and the stately beauty of its lake-enlarged course. The Tay pours more

Irish beauty must be given to the Blackwater, an exquisite stream that can challenge comparison with the waters of the world as it laps the craggy castle of Lismore before it broadens out into its placid estuary, which reaches the sea at Youghal.

The rivers of all lands that bear rich commerce are, no doubt, known most widely, but, after all, it is the streams which draw us by their loveliness that are remembered longest and most vividly, the prattling, dancing, wayward streams, the coy waters sheltering in gracious woodlands, the shining waters that girdle ancient cities or carry to our ears the songs of the poets; and in all these charms the rivers of the British Isles are unsurpassed in Europe.

THE MOUNTAIN TOPS OF THE BRITISH ISLES

IT would be interesting to know how many people have stood on the topmost points of England, Scotland, Wales, and Ireland. Perhaps they would not number more than one from every million of the inhabitants of the British Islands. Many thousands, no doubt, who have climbed Ben Nevis, the highest British mountain, have climbed Snowdon, the highest mountain of Wales, and also Scafell Pike, the highest English mountain, but few of them will have completed the round by ascending Carrantuohill, the topmost point of Ireland. Let us suppose ourselves ascending to each of these great national summits, and looking around at the view.

Though these mountains only range between 3210 feet, the height of Scafell Pike, and 4406 feet, which is the height of Ben Nevis, they are all real mountains, massive and imposing, for they rise suddenly almost from the level of the sea, with an uplift of at least three thousand feet which the eye can trace at a glance. It is the upward slope of any mountain visible at once from its base that makes it impressive, and not the height above a distant sea. Thus, Ben Nevis is judged by its upthrust from Loch Linnhe, the arm of the sea that reaches the mountain's foot, just as the far-famed Rigi, in Switzerland, is judged by its rise above the lake of Lucerne, into which it steeply descends. Well, the summit of the Rigi is only 21 yards—less than the length of a cricket pitch—higher above Lake Lucerne than the summit of Ben Nevis is above Loch Linnhe.

One may be three thousand feet, or more, above sea-level, as on considerable areas of the Canadian prairie, and see no mountain, or even a hill, because the ascent to the plateau has been gradual, but anywhere in the world a sudden and steep

rise of three thousand feet from a valley, plain, lake, or sea makes an imposing mountain, which captivates the eye in proportion to the ruggedness of its face, or the boldness, or strangeness, or beauty of its outline. Whether judged by the tests of visible height, or steepness of ascent, or attractiveness of sky-line, or wildness of surroundings, Ben Nevis, Snowdon, Carrantuohill, and Scafell are all real mountains, each living with a character of its own in the memory of everyone who has climbed it.

Ben Nevis, in Inverness-shire, is a broad-backed mass of greenstone rock on a granite foundation, with its precipitous side turned northward towards the southern end of the Caledonian Canal. On the south and west of it the wild Glen Nevis empties its waters into the sea at Fort William, once a stronghold built to overawe the Highland clans who remained faithful to the exiled Stuart House, but now a tourist centre. A gentle walk of two miles up the glen brings the traveller to the foot of the mountain, and a zigzag, upward pony-path. Anyone can ascend this monarch of British mountains who can walk for three or four hours uphill, and who does not mind a footway of small, loose stones.

The path was made to ease the ascent for visitors, and the conveyance of supplies to a little cowering hotel on the summit and a thick-walled observatory and telegraph station. The observatory, to record the weather and the force of the wind, is now disused, owing to the meanness of unscientific British Governments. We can spend £7,000,000 a day on war, but cannot spend £1000 a year on this useful fortress of science.

How long should it take anyone to mount this fourteen hundred yards of perpendicular height from the point

where the path strikes up the mountain? The rule of mountaineers is that a thousand feet should be climbed in an hour where the "going" is good; but the young and long-winded, on a short course like this, can manage two thousand feet in an hour, and the hardy young men in charge of the observatory usually reduced the customary four hours of the ascent to two. The wisdom of years, and the glorious prospects that broaden out as shoulder beyond shoulder is mounted, will, however, make four hours the more desirable time for steady, grinding labour.

When the summit is reached, it is found to be a stony plain of from eighty to a hundred acres, as might have been expected from the massive look of the mountain from below. To the northward the cliffs drop sheer for fifteen hundred feet, and in their crevices retain patches of snow throughout the summer.

Looking Down on Scotland from its Greatest Height

If the atmosphere is clear the whole of Highland Scotland is spread around, a sea of billowy mountains, from the ponderous masses of the Cairngorms in the east, at the sources of the Dee and Spey, to the jagged Coolins in Skye on the west, and southward past Ben Lomond to Goat Fell on the Isle of Arran. Here, from the very summit of Scotland, we can see how the mountains have been formed; we see that the crust of the country was once thicker and higher, and has been worn down in the valleys and plains, leaving the heavy mountain masses like Ben Nevis and the Cairngorm group nearer the original high level of the land. Where the wasting away has been more complete, the mountains are left as comparatively solitary peaks, with wider intervening spaces.

Snowdon, in Carnarvonshire, the highest and finest mountain in Wales, 3560 feet above sea-level, is one of the most striking and individual mountains of its size in the world. It is too majestic to be spoiled by the railway which carries to its top people who have never known the joy of climbing

a mountain, and who do not realise the grandeur with which its central peak is built up and buttressed by Nature's architecture. The name Snowdon is popularly given to the central loftiest peak, though this is but the culmination of a wide-spreading mountain mass that converges towards the centre from outlying peaks along narrow rocky ridges. It is only from a distance, or from special points of view where the radiating ridges allow the sight to reach the central peak unimpeded, that the noble structure of the mountain can be understood.

The Three Hours' Walk to the Topmost Point of Wales

Round the mountain and its divergent ridges runs a cycling and coaching road, about a thirty-six-mile journey—from Carnarvon to Llanberis, over the Llanberis pass between Snowdon and the Glyder range to Pen-y-gwryd, down the Nant Gwynant vale to Beddgelert, and back to Carnarvon. The mountain radiates its peaked ridges over the greater part of this road-enclosed area, and up the tamest and easiest ridge runs the popular railway. The walker who wishes to feel the spirit of the mountain will ascend on foot, preferably from Pen-y-gwryd (pronounced Penny-goorid), certainly not from Llanberis, and the expert climber will make his way along the edge of one of the narrow ridges, preferably Crib Goch, the "red-crest." By using these approaches a proper respect for a very noble miniature mountain is learned. The distance to the top from Pen-y-gwryd is five miles, and three hours is a reasonable time to take.

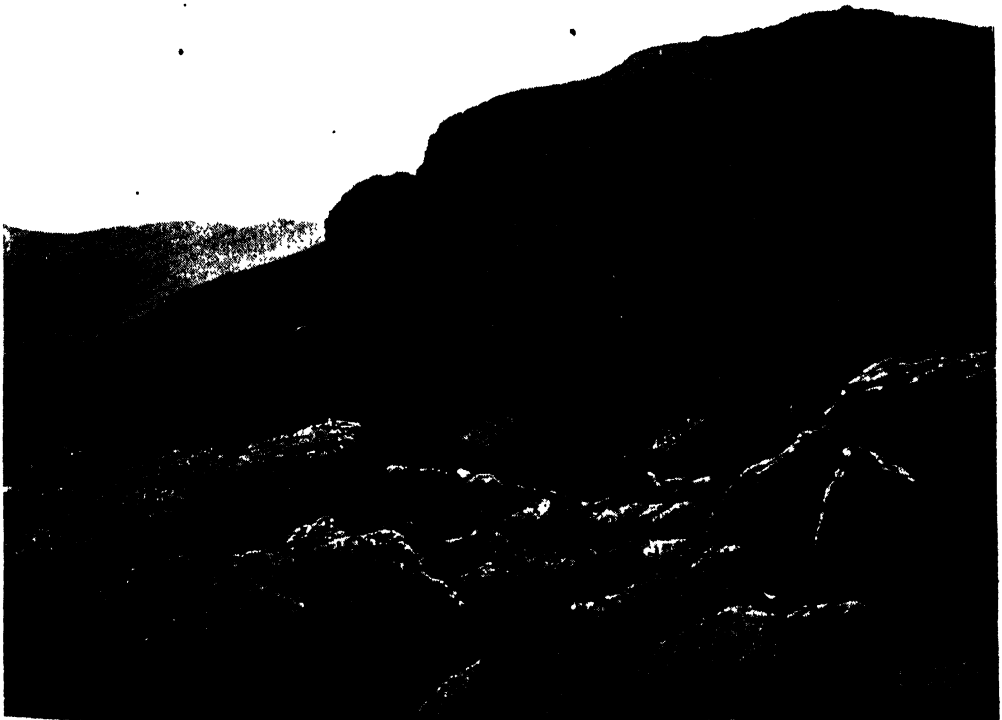
The Far-Flung Panorama from the Heights of Snowdon

From the summit all the mountains of Wales as far south as Cader Idris may be seen, but the gentleness of the valleys is almost entirely hidden. The Welsh coast is mapped clearly down to St. David's Head at the extremity of Pembrokeshire, and over the Irish Sea northward peer the Cumbrian Scafell, and Snaefell in the Isle of Man, while the deeply-notched line of the Irish Wicklow Hills, with the

THE TOPS OF ENGLAND AND SCOTLAND



BEN NEVIS FROM THE VALLEY—THE HIGHEST POINT IN THE UNITED KINGDOM



SCAFELL PIKE, IN THE LAKE DISTRICT, THE HIGHEST POINT IN ENGLAND

THE CHILDREN'S TREASURE HOUSE

Sugarloaf in the centre, lies far out to the west. For width of view no scene in the British Islands exceeds that spread around from Snowdon; yet, to the mountain lover, the stern slopes falling away from the diverging ridges, each ridge carrying a path towards the valleys below, will compete in interest with the far-flung panorama. The mountain itself becomes a dominating personality. If you cannot feel that when the train and the crowd are there, you will feel it if you stay on the summit till the night falls.

The reasons why comparatively few people ascend Carrantuohill (3404 feet), the highest point of the highest range in Ireland, Macgillicuddy's Reeks, in county Kerry, are first because people do not climb hills in Ireland as an exercise or amusement, and next because the Reeks are so far away from comfortable sleeping quarters that the journey out and back cannot easily be made on foot in a day.

The Rough Wild Mountain Peaks that Rise from the Valley of Killarney

Once when the writer, late in May, was seeking at the most popular hotel in Killarney for someone to accompany him to the summit, he was told that no one, as far as they were aware, had made the ascent *that year*. The usual route is by a ten-mile drive in a jaunting-car, followed by about six hours of heavy walking, which returns the traveller to the highway about twelve miles from Killarney, unless he returns by boat down the lakes. In any case, it is a very long and toilsome day, starting early and finishing late. And yet no lover of the mountains who has faced the haunting outline of the Reeks when the hilltop is reached on the road from Kenmare to Killarney will ever be satisfied until he has mounted to the summit of that wild and lonely range.

When the attempt is made the traveller will find he is left to his resources—no path has been prepared for him as on the other national mountains. As he ascends by the Gladdagh river, where there is a track, he sees before him the wild Hag's Glen, flanked on each side by

lakes, and, beyond, the bold, inaccessible cliffs of Carrantuohill. A steep climb—not a walk—of an hour or so up a slope of mingled grass and rock lands him on a narrow ridge connecting Carrantuohill with a lower peak, and another grassy clamber, somewhat shorter, turns the flank of the precipices he has seen from below, and brings him on the summit.

The Sad and Grim Precipices of the Beautiful Emerald Isle

A fine view of sea and land from the Kenmare river round to the mouth of the Shannon is spread below, but always the roving eye returns to the grim precipices which form the sides of these bare and solitary Irish peaks, and all the while, whether watching from the summit or picking an unfrequented way down carefully towards the Gap of Dunloe, the surroundings bring, somehow, a sense of sadness, and not of hope, romance, and strength, as when one has made friends with a Scottish mountain stronghold. The Reeks are grim and sad; Killarney is inexpressibly lovely, yet sad.

A very unusual proportion of the people who visit the English Lake District are mountain-lovers, and so know the mountains, individually, as they are seen from below, and as they reveal themselves afresh while their slopes are being climbed; but probably by far the larger number of visitors to the Westmorland and Cumberland tourist towns, Bowness, Ambleside, and Keswick, never see Scafell at all, because it rises from two of the remoter valleys—Wasdale and Eskdale—that are reached almost solely by walkers.

The Little World of Mighty Hills Peaked Round the English Lakes

The most distinctive feature of the Lake District is its compression of various forms of beautiful scenery in a very small area. Within twenty miles as the crow flies east and west, and twenty miles north and south, there are fifty mountain peaks of more than 2500 feet in height, a dozen large lakes, twice as many lovely tarns or small lakes, between

THE MOUNTAIN TOPS OF THE BRITISH ISLES

twenty and thirty valleys, with scenery sweet and gentle in some of them, stern and grand in others, and a score of rivers and becks that have a name in literature. All this variety of interest and beauty is crowded into a space no larger than that filled by one group of Scottish mountains—the Cairngorm mass of half a dozen

from south to north, and in it or adjacent to it lie the lakes Windermere, Rydal Water, Grasmere, Thirlmere, Derwentwater, and Bassenthwaite. It is through this valley that the incessant stream of visitors passes; but far away from it, ten miles to the westward, and only seen as one among a cluster of distant peaks, rises Scafell



SNQWDON, THE HIGHEST POINT OF WALES

ponderous similar heights of four thousand feet. So compressed is the English Lake District that the seven highest mountains, though they are not grouped together in one part of the district, have all been ascended by one pedestrian in a single day of twenty-four hours.

A deep trough or valley runs through and halves the whole district

Pike, the highest English mountain. It forms the loneliest part of the western half of the district, this Scafell mass of which the Pike is the summit, and until the traveller has climbed it he does not know how England culminates in mountain wildness.

Into the Scafell group of peaks half a dozen valleys penetrate, and we might approach it by any one of

THE CHILDREN'S TREASURE HOUSE

them. From the south we could reach the base of the mountain by way of Eskdale, a valley that ends in uttermost stony wildness; from the south-west by Wasdale, where, at the head of a gloomy lake, the houses nearest to the mountain are to be found; from the west by Ennerdale; from the north by two branches of romantic Borrowdale, which climb into solitude on either side of the finely named mountain Glaramara; from the east by Langdale, a side valley of the great central trough. Let us take this avenue of approach.

The Way that Leads Up to the Roof of Little England

Langdale heads straight into the midst of the mountains, with the Langdale Pikes falling steeply into it from the north, and Crinkle Crags and Bow Fell, outliers of the Scafell mass, on the south. As the vale narrows at its head it takes the name of Mickleden, and ends at a steep, grassy bank which the traveller must mount either by climbing up the bed of a rocky stream, the Rossett Ghyll, or zig-zagging up the bank by a footpath. The farmed valley is left for the hill-side at a height of 500 feet, and an hour and a half of steep ascent, under the shadow of the fine peak of Bow Fell, brings us past the glossy-black Angle Tarn, to the Esk Hause plateau, in the very midst of the mountains. Here, at a height of 2370 feet, is a shelter from the frequent storms. Often in summer camping parties may be found on the Hause, though it is a three hours' journey on foot from any house whence food can be fetched.

The Summit of Rocky Hills with Lakes Brightening the Valleys

From the Hause one may scramble down roughly into Eskdale on the south, or into Borrowdale on the north. The path to the summit of England lies to the south-west, along the side of the Scafell range, not far from its ridge. "Path" is scarcely the word to use, since the direction is only marked in the more rocky parts by the scratching of nailed boots on the continuous rocks, and by little cairns of stones, not easily visible from one to

the other in a moderate mist. A mile and a half of this walking from Esk Hause brings us to the foot of the highest "Pike," which is really a huge heap of rocks wedged together and climbed by stepping from block to block. The Pike (3210 feet) is surmounted by a well-built cairn.

The view around is of a tumult of rocky hills with lakes brightening the intervening valleys here and there. No other English mountain brings us so near to Nature in her sternest and most chaotic mood. The summit of the mountain Scafell (pronounced Scawfell), 3162 feet, adjoins the higher Pike across a deep chasm bridged by a narrow ridge. The central Scafell mass, indeed, consists of three heights rising from the same base, Scafell, Scafell Pike, and Great End, the direct distance from the summit of Scafell to the summit of Great End, the two extremes, being about two miles.

The Inexhaustible Character of the Mountains of our Land

Immediately below the mountain to the westward is the deep, stern lake of Wastwater, reached, if we retrace our steps to the Esk Hause, by the Sty Head Pass, between Great End and the fine mountain Great Gable. Wasdale Head, the valley immediately above Wastwater, is the chief centre for English rock-climbers who practise their skill and daring on the rugged mountains around, particularly Scafell Pike, Great Gable, and the Pillar, which overlooks the neighbouring valley of Ennerdale.

This glance at the heights of the British Islands has only caught the highest summit in each country, using it as an illustration of homeland travel, but it must be remembered that the charm of our native mountains is inexhaustible in its variety. When we know that within the British seas there are a hundred peaks of three thousand feet in height, we shall never despair of finding scope for a love of the wilder uplands, a love that will also help us to appreciate more the gentler scenes which combine with mountain grandeur to make our islands the most beautiful in the whole world.

THE GREEN WALLS OF ENGLAND

Not long ago a Prime Minister of the British Empire, having seen the Motherland for the first time, went home to Great Australia with his mind enriched with lovely pictures of this little land; and nothing that he could remember, he said afterwards, was more beautiful than our green lanes.

The green lanes of England, and the hedgerows that line them like green walls, are as nothing to most of those who dwell among them, but to him who comes from far away they are something not to be forgotten among the natural glories of our countryside.

AT all hours of the day the winged couriers of commerce speed like great dragon-flies above us, clearing new ways through the radiant air to the four corners of our Motherland. They are so high that we who shade our eyes to look are almost invisible to them.

And what they see is a grey patch of the town, and beyond it a green expanse, crossed and traced with innumerable lines—our England, the land of fields and hedgerows.

No other country shares with us this peculiar charm. Nowhere else does the traveller find pastures and meadows so divided and enclosed, every acre with a herbaceous border of its own, every lane with a flower garden on either side. They run on endlessly, these green lines, up hill and down dale, chasing each other through the woods, losing themselves in the gorse bushes of the commons, and only dropping to earth when confronted by the stone walls of the town. In the North Country, it is true, there is not the same profusion of flower and shrub that we find in the warmer counties, but the lichen, mosses, and ferns that slowly creep over the low limestone walls make the little rock garden of the poor.

See how Spring lays her hand on the hedgerows while there are still snow lines in the northward hills. The first green tips show on the thorn bushes, those friendly, hardy shrubs that are kind to bare places. In

sheltered nooks at their feet peeps first the primrose and then the violet, dainty forerunners in the yearly pageant. Then with May comes a riot of blossom, when the gorse and broom are ablaze, and the service bushes, the blackthorn, and the elder vie with each other and make haste to be beautiful before the wild rose robs them of their right.

Flowering nettle—beloved of the white cabbage butterfly—and the dainty stitchwort join the ranks of the violet and cowslip. Then come the champions, the hedge mustard, cleavers, bedstraws, and with them the faithful and ever beautiful buttercups and daisies. Over their heads thrushes, finches, linnets, and hedge-sparrows bring up their families to the tune of an eternal *Te Deum*, calling on all men and all things to praise the Lord.

A little later masses of tall, wild hawkweed appear, crowned by the lovely honeysuckle and convolvulus, and patches of creeping, wild clematis, or traveller's joy, or "old man's beard," as the children love to call it.

The autumn, too, is partial to the hedgerows. Hips and haws are there, and berries of the elder, service, bryony, and bramble. The faithful robin is with them, still clinging to his summer song. And when winter comes the evergreen holly and the faithful ivy keep their wayside tryst until the cold, dark months are over.

But these green borders of our roads not only provide a garden for the wayfarer; they are God's almshouses. They give shelter to innumerable little lives that are hurt or broken by the way. For others they provide a home altogether, and, when all is over, they afford a place for gentle burial under last year's leaves. If we sit down under one of these hedges, we shall certainly see some of the pensioners. Hush—not a sound! Something is moving in the

THE CHILDREN'S TREASURE HOUSE

grass at our feet. As we watch, a few inches away emerges a busy black-beetle, impelled by a mysterious desire to cross the deeply rutted road.

The Busy Little Creature in his Coat of Mail Creeps Out at Top Speed

It is a great voyage to him, something like crossing to Spain before the days of steam. He scurries on a space, but as we bend to follow him with our eyes the shape of our shadow alters on the ground, or perhaps he suddenly smells us with those wonderfully keen organs of his. He stops dead, pretending very hard that he isn't there. If we sit motionless, he will soon be reassured and continue his journey. His coat of mail shines blue-black and green in the sun, and he knows it and is proud.

We can ill afford to scowl on the beetle brotherhood; they are some of the finest of Nature's scavengers, continually clearing away decaying matter, both vegetable and animal, and they are not above finishing a meal some of their bigger brother scavengers have left unconsumed.

All is quiet under the hedge. The beetle is almost across the wide road, and something else stirs in the shadow. We realise that the round thing we took for a pebble is really a house-on-his-back snail, and a friend has come to pay him a visit. It has taken the caller an incredible time to arrive, because his top speed is something like one mile in sixteen days.

The Sight that Frightened Four-and-Twenty Tailors Who Went to Catch a Snail

Now the two confront each other, their heads well out of the shells, moving to and fro in the way of a Chinese mandarin. The tentacles, or horns, are never certain whether they will be quite in or quite out, and, as we watch the visitor, the tentacle nearest us—that hinder one with the eye on the end—shoots out suddenly like a telescope to its fullest length. It has a most warlike effect, and we begin to understand how the four-and-twenty tailors set out to catch a snail and got very badly frightened.

But both snails are too hungry to be curious for a very long time.

Just behind the hedge is the farmer's cabbage-patch, and thither they turn, making all the speed they can to reach the first succulent leaf, the thieves!

Before they are well out of sight a frog takes them at a flying leap, and lands with cruel haste close by our side. Then; fixing us with his wide, unwinking stare, he suddenly realises he has made a mistake. He copies the tactics of the beetle and sits motionless, pretending hard that he isn't there. But by an unfailing instinct he knows that his arch-enemy, the grass snake, is on his trail, and that if he doesn't get out of the way very quickly he will be so paralysed with fear that he will be unable to move at all. So, thankful that he is made in such a way that he hasn't to go back and make a run before he can leap, he just does a "right turn" on his fat little haunches—a flash, and he is gone, and the grass snake comes up too late.

The Ladybirds and the Caterpillars Prepare to Go to Bed

The grass snake is not much interested in us. One of his half-yearly fits of hunger is on him. He stays a few seconds, then makes his way elsewhere. As far as food goes, he is one of the most easily satisfied of his kind. Three or four frogs provide him nutriment for a whole year; yet he suffers badly and will soon die if he is unable to find water.

Meantime, the sun is sinking. The beautiful tortoise and peacock butterflies, the ladybirds and caterpillars that have companioned us all day, take note of the time and prepare for bed. In their place come up the fluttering night moths, attracted, perhaps, by the unearthly sweetness of the honeysuckle, that at this hour sheds her best perfume. They must be careful, those fragile moths and those hordes of buzzing insects, for the bats will soon be shooting like little black comets out of the sky; and they must beware of the owls, and of the hedgehog shuffling on his nightly rounds.

The day goes down and night comes up, and soon all Nature waits patiently for the dawn to rise.

THE LOVELINESS OF THE HEDGEROWS



A PLEASANT PEEP BY THE WAYSIDE—FROM A PAINTING BY CHARLES W WYLLIE

SIR FRANCIS DRAKE CHASES THE SPANIARDS



THE PURSUIT OF THE SPANISH FLEET UP THE NORTH SEA

STORIES OF THE NORTH SEA

THE North Sea—what a tale its waters were telling not many years ago as they beat against the shores of stricken lands, echoing with the tramp of armies and roaring with the sound of cannon, and came back to our quiet British Islands!

Not once nor twice, but many times; in freedom's ancient story, have these narrow waters won for themselves eternal fame. Here Drake chased the Armada to its doom; here the fireships raced with the wind into the Spanish fleet; here fought Blake and Duncan and Van Tromp; here, for ages past, have sailed and fought and lost and won the men whose lives were on the deep waters. It is good to read their stories now, with the memories of those five great years still fresh in all of us.

Sir Francis Drake Hunts the Spaniards

SLOWLY and majestically through the Straits of Dover towards the North Sea came the Spanish galleons and galleasses, terrible in beauty and overpowering in number and size. Built high like castles they were, these ships of the Invincible Armada, with their upper works proof against firearms, and their main timbers five feet thick to withstand English cannon-balls. From the tall masts hung great sails, painted with the figures of saints and the red cross of the new Crusaders.

Twenty thousand soldiers and gentlemen adventurers and eleven thousand sailors and rowers were carried by the Armada, and there were thirty thousand more troops waiting at Dunkirk for the Armada to convoy them to England. Philip of Spain had resolved to conquer these islands before making another attempt to subdue the Dutch people.

But the Duke of Medina Sidonia, the commander of this immense fleet of a hundred and thirty of the mightiest ships in the world, did not feel at all in the mood to conquer when he sailed into Calais Roads on Saturday, August 6th, 1588, to arrange for the invasion of England. For two miles away was a little fleet of small English ships, most of them no bigger than modern pleasure yachts, but manned by the most daring and skilful of fighting seamen. The duke had already learnt some-

thing about them while sailing up the English Channel.

Happily for the Spanish duke and his Armada, these English seamen were now in no position to fight—they had scarcely any gunpowder. There were stores of it in the Tower of London, but Queen Bess had been so sure that Philip would not attack her that she had not supplied her ships with ammunition.

Lord Howard, the English admiral, was in despair. Many of his ships had only food for one meal, and none had more than enough powder for a day's fighting. Yet, if he could not keep the seas and destroy the Armada, England would be swept by an army of fanatics with fire and sword. At five o'clock that fateful Saturday afternoon Lord Howard held a council of war in his cabin, and Sir Francis Drake attended it, and showed how England could be saved.

As darkness fell, Drake took eight English ships, removed the crews, smeared the rigging with pitch, and filled the hulls with tarry tow, broken wood, a little gunpowder—anything that could be spared to make a blaze. Then, in the moonless, cloudy night, when the Spanish soldiers and seamen were stretched in sleep on the decks of their floating castles, dark objects came drifting in on the midnight tide towards the spot where the great galleons were clustered thickly at anchor.

THE CHILDREN'S TREASURE HOUSE

Suddenly pyramids of fire shot up from these dim, drifting shapes; flames leaped from sail to blazing sail, flickering along the ropes, and casting dancing gleams on the dark water below. Masts and fore-castles, hulls and bowsprits, were visible in a lurid conflagration. Wild cries of alarm, mad screams of fear, awoke the sleepers, and they joined in the panic, shouting as sparks and dropping fire from the blazing ships started outbreaks of flame on the galleons.

Among those who lost their heads was the great Duke of Medina Sidonia himself. Instead of ordering out boats to tow the fire-ships away from his vessels, he commanded all cables to be cut or slipped. So each ship of the Invincible Armada, working in terrified

Spanish gunners, with over two thousand cannon, could not hit our ships. The rough, stormy sea destroyed their aim, and their continual shots went either into the air or the water. Our sailors, on the other hand, accustomed to fire straight in any weather, rent and riddled every ship in the Armada.

Drake and his men did not know what damage they had done, as they made no captures. Their orders were to sink and destroy the invader's fleet, and protect the country from the Spanish army. They did not attempt to take prizes, but struck with all their power and skill as fast as they could all through the day.

Some of our ships then went back to the



WRECKAGE FROM THE SPANISH ARMADA—FROM THE PAINTING BY P. R. MORRIS

haste in the light of the fires, abandoned her anchors and set sail for the open sea.

The wind was rising and threatening a storm, and Drake, with fine seamanship, swept away with more than half of the English fleet to take quick advantage of bad weather. He caught up with the Spaniards off Gravelines, and, keeping to windward of them, got within speaking distance of the Duke of Medina Sidonia. The Englishmen opened the conversation with all their cannon, while the big galleons were heeling over and displaying the low parts of their hulls below the water-line.

From eight o'clock on that wild Sunday morning to twilight the Englishmen worked their guns, till their last shot was used, and every man weary of the labour. The

Thames for food and powder, but Drake hung on to the Spaniards, fasting when there was nothing to eat, and chased them in a wild, south-west gale through the North Sea as far as the Forth, in Scotland. There our great sailor had to turn and battle through the tempest to Harwich and Margate to get food for his starving men.

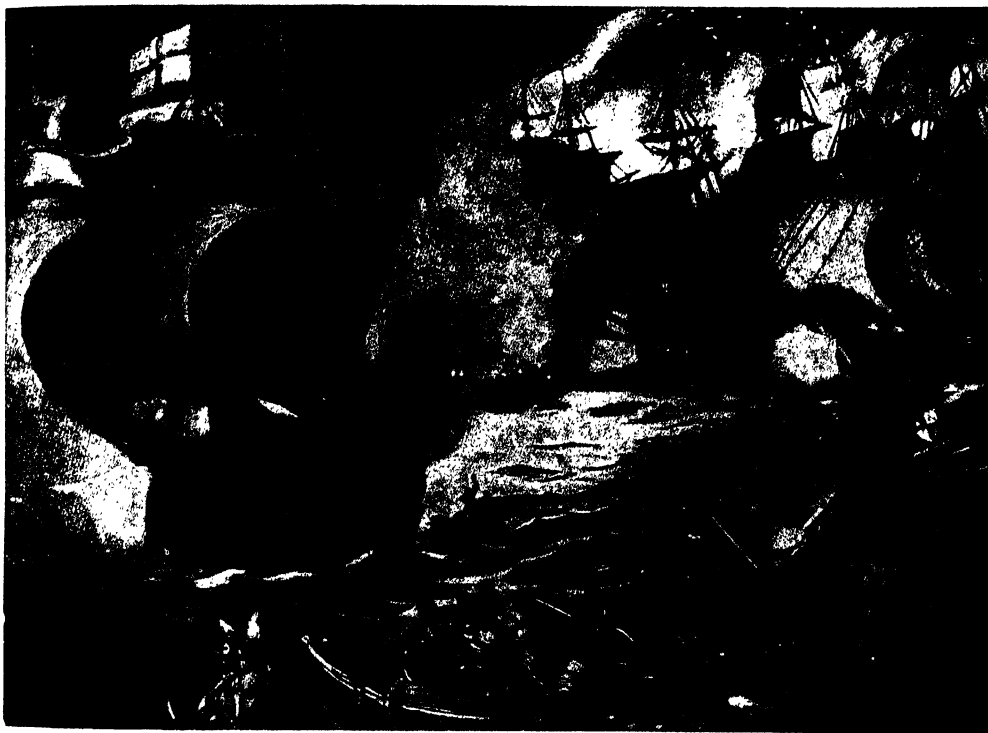
The enemy then could also have returned to Calais, but he did not. The broken fleet fled round Scotland, and was cast in wrecks all along the western coast of Scotland and the coast of Ireland. Only one third of the Invincible Armada returned to Spain, and a great number of the ten thousand men in the surviving ships were sick and dying.

Some hundreds of years passed before Englishmen learnt why the Armada fled

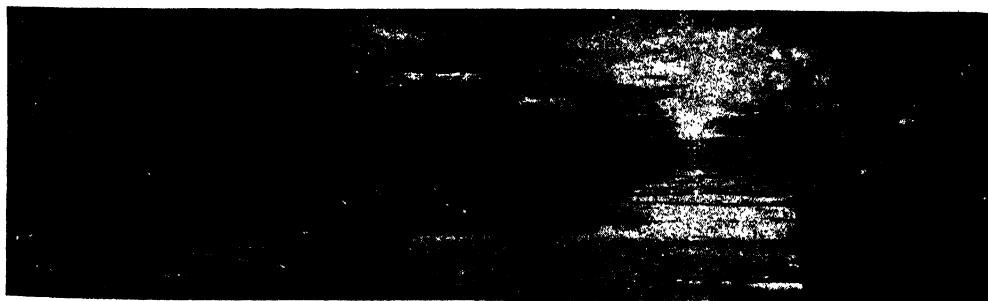
THE SPANISH ARMADA IN STORM, FIRE, & RUIN



THE SHIPS OF THE ARMADA DRIVEN FROM THE ENGLISH COAST BY STORM



DRAKE'S FIRE-SHIPS SAILING INTO THE SPANISH FLEET



THE UTTER RUIN OF THE ARMADA—WRECK OF THE SPANISH SHIPS ON THE RUGGED ATLANTIC COAST

THE PROUD SPANISH GALLEON REACHES ENGLAND AT LAST: HOME WITH FRANCIS DRAKE



SIR FRANCIS DRAKE'S SHIP BRINGING INTO TORBAY A SPANISH GALLEON CAPTURED IN THE ATTACK ON THE ARMADA

STORIES OF THE NORTH SEA

into the tempest rather than come back to meet Drake again. It is only recently that the facts have been revealed by the study of old Spanish documents concerning the men who survived with the Duke of Medina Sidonia. The Spanish sailors were afraid to return through the North Sea. But they feared storm and shipwreck in unknown waters less than they dreaded

Drake. The fire of his guns on a single ship had slain four thousand men! The English gunners never guessed what terrifying havoc they had wrought. They had holed every vessel, dismantled or shattered almost every cannon, and turned the decks into abodes of death. It was better to drown than face such gunnery again, and so they sailed homewards around Scotland.

Old Marten Tromp

MARTEN TROMP, a thick-set old Dutchman with a weather-beaten face and twinkling, merry eyes, occupied the foreground. The eyes of Europe were upon him as he sailed from the River Maas one misty morning towards the end of July, 1653, with eighty men-of-war and five fireships. Some way off, along the Dutch coast, were ninety English warships with many small boats, under General Monck.

Acting under the orders of Oliver Cromwell, Monck was blockading the Zuyder Zee, where another Dutch admiral, De Witt, was sheltering with twenty-seven men-of-war. De Witt and Tromp wanted to join forces and then attack the English fleet. Monck wanted to keep the two Dutch admirals apart, and defeat them separately, bringing his whole force first against one section of the enemy's fleet and destroying it, and then turning against the other section. In this way he would be superior in numbers at each battle.

But Monck, a soldier put aboard ships to fight on sea, was no match in seamanship for Tromp. Tromp on sea was what Cromwell was on land — the greatest commander in the world. We had no sailor equal to him, for both Blake and Monck were soldiers, while Tromp was a seaman of the stamp of Nelson. He proved this as soon as he came out of the River Maas, for he plied to and fro there until he attracted the attention of the English fleet, and lured them to come from the north and attack him.

But, when the English ships attacked, Tromp so skilfully manœuvred his fleet that he got the English on his lee. That is to say, he reached such a position that the wind blew from him towards the enemy. As they could not move directly against the wind, while he could sweep towards them with swelling sails, he had the attack. But, instead of fighting, he sailed away and joined his forces to De Witt's.

The united Dutch fleet then numbered a hundred and twenty ships, while the English fleet was only ninety. Even then,

however, the material advantages were on the side of the English, for they had at least twenty ships larger than the largest Dutch vessels, and more guns. Still, Tromp had now gathered together all the vessels his country could put into the line of battle, and he relied on his superior seamanship to adjust matters.

But a grave disaster occurred to this Dutch Nelson just before his last great battle opened. Like Nelson, Tromp had invented a new system of naval warfare, which enabled him often to win against his opponents. Indeed, he was more original than Nelson. For Nelson's system had been worked out by a Scottish landsman named Clerk, and sent by him to Admiral Rodney, who put it victoriously into practice, and then handed it to Nelson.

Tromp's system was entirely his own. While the English and other nations fought with all their ships clustered round the flagship anyhow, Tromp arranged his strongest vessels in a line, each ship a cannon-shot from the other, and all the ships were divided into squadrons under a separate leader, who took orders from the admiral's flagship. In this way, Tromp's fleet came into action with the disciplined power of a regiment against a mob.

This was Tromp's surprise for his opponents. At dawn on July 31, 1653, he sailed out to battle off Scheveningen, with his fleet arranged in a line of five squadrons. To his amazement the English ships came sailing towards him in the same formation!

His secret of victory had been discovered! It was afterwards said that Tromp had himself betrayed it in talking to an English naval commander, Admiral Penn, and that Penn had communicated the idea to Monck, with the result that it had been adopted on the 'critical day of the great battle for the command of the sea.

Serious though the situation was, Tromp rose to meet it. He seems to have tried to break the line that the English had copied from him. In his ship, the *Brederode*, he

broke through our Blue Squadron; but he received very little support from his own ships, and the massed gun-fire of the English vessels that closed round him was overwhelming. Tromp kept up a furious cannonade, and as there was little wind his ship was shrouded from sight by a dense cloud of smoke.

This was why no Dutch ships saw the dreadful signal flying from their admiral's mast. It was a signal for a council of war—a strange thing to call in the midst of a furious battle. When the smoke cleared away and the signal was visible, such flag-officers as could reach the admiral's ship went.

There they found the lifeless body of Marten Tromp. An English musket bullet had pierced the heart of the bravest and ablest seaman of the age. The only Dutchman who could stand against Cromwell was dead. But, even if he had lived, England would have triumphed, for twenty of his ships were sunk and many more were seriously damaged, and Holland, after a day of prayer and fasting, surrendered the command of the sea to England, and made

terms with Cromwell. She had an unrivalled sea fighter, thousands of hardy, skilful sailors, but her ships were built too cheaply. The main timbers were much thinner than those used by English shipwrights, and the frail Dutch ships sank under gun-fire that would scarcely have damaged an English man-of-war. It was a battle between the honest English shipwright and the cheeseparer Dutch.

Holland lost because she cut the cost of her fleet down to the last florin, while Cromwell spent half the revenue of England, Ireland, and Scotland on his navy. Even Marten Tromp could not redress the balance between Holland, who wanted power and would not pay for it, and England, who poured out all her treasures and redoubled her taxes to build strong ships.

It is true that the Dutch had some sort of a revenge when a king again sat on the throne of England. For Charles II. neglected the strong navy built up by Cromwell, and the Dutch fleet sailed up the Thames and Medway to the town of Chatham, where they inflicted heavy losses on the British ships they found there.

The Surrender of Captain Jermy

TO look at, Captain Seth Jermy did not seem a fighting man. He was a hunchback, scarcely five feet high, and a twisted neck did not improve his appearance. But such was the man our Admiralty sent in a frigate across the North Sea in 1707 on one of the most difficult tasks that were ever set a sailor.

He had to take his frigate, the Nightingale, to the island of Texel, in North Holland, where a fleet of thirty-six merchantmen were waiting in the Zuyder Zee to reach the Thames and escape the French battle fleet. Captain Jermy found the English merchant ships and brought them almost to the Thames, but there the entire expedition seemed to be doomed to end in overwhelming disaster.

Six great French galleys, under Comodore Langeron, had heard of the affair, and they stood outside the river to capture all the ships. It was impossible for Captain Jermy, with a single frigate, to dream of beating off half a dozen galleys. They were narrow vessels, 150 feet long, rowed each by about 300 slaves, and carrying in addition a fighting crew of 150 men. The prow of every galley was a great iron thing with a sharp point, and in action the vessel was rowed furiously, with all the power of

the slaves, against a hostile ship, so that the sharp iron prow either sunk the enemy or drove into the wooden hull and held it while the fighting crew poured over the sides and stormed the stuck and stricken vessel. Each galley, moreover, carried four guns in front, and there was a very heavy cannon that worked on a circular platform in the middle of the boat and could be fired in any direction.

Captain Jermy could neither save his own ship nor help the defenceless merchants. The odds against him were impossible. But there was a fine, quick-working, heroic mind in the misshapen body of the Englishman. He resolved to sacrifice his frigate in the wild hope of saving the convoy. He signalled to the merchantmen to crowd all sail and drive for the Thames. This they did, pursued by four of the galleys. Then the other two galleys, one under the command of Langeron, attacked the small British warship.

Captain Jermy continued calmly on his course, until he saw that Langeron's swift galley was three miles ahead of the second hostile vessel. The English captain then suddenly turned, and bore straight down on the leading enemy. As the vessels approached for the expected shock, the

THE LAST ENEMY THAT CAME INTO ENGLAND



THE BURNING OF THE ENGLISH FLEET OFF CHATHAM 1667



AN OLD DUTCH PICTURE OF A BATTLE BETWEEN THE DUTCH AND THE ENGLISH FLEETS

THE CHILDREN'S TREASURE HOUSE

galley fired her forward gun. The frigate was silent, and just when the iron prow was about to be driven into her hull the English ship again, by a masterly piece of seamanship, turned and fled.

Shouts of triumph and laughter rose from the sweating slaves and fighting crew of the galley, and the rowers redoubled their efforts to overtake the frightened, flying enemy. Closer and closer the galley crept; the helmsman stood ready to send the prow into the stern of the frigate, and the crew, with hatchets and cutlasses, stood ready to board as soon as the cannon had swept the English deck.

But, just as the galley's prow was about to strike, Captain Jermy jammed his helm hard. The stern of his ship swung sharply round, and the iron point of the galley missed the mark so closely that all the oars on one side of the galley were splintered like paper against the frigate's hull. Out swung the English grappling irons, and the galley was pressed close to the side of the frigate, right under her guns.

Then the English gunners replied to the galley's first shots, and a terrible storm of grape shot and canister swept the huddled crowd, who were as much exposed as if they had been on a raft under fire from a

fortress. Twice the hurricane of the broad-side smote full against the foeman.

Then it was that Commodore Langeron did what Captain Jermy had intended from the first to compel him to do. The other four galleys were rowing along, confident of cutting out the English merchant fleet and capturing them every one. They had almost blocked the pathway to the Thames, and in five minutes the English ships would be at their mercy. But Langeron hoisted the flag of distress, after he saw how far away his fifth galley was. At this urgent call for help from their commander, the four galleys were forced to let the English merchant fleet sail safely away to London, and come with all speed to the fight.

When Captain Jermy saw from his cabin window that the last sail of his convoy was secure within the Thames, he went on deck. Around him were the six galleys, and the deck was occupied by the Frenchmen. Stepping up to the commander, Jermy offered his sword as a sign of surrender.

"No! Take it back, monsieur," said Commodore Langeron. "Take back a sword no man deserves better to wear. You fairly outplayed me!"

A Long, Long Watch in the North Sea

THE island of Texel, famed for its sheep pastures, stands at the entrance to the Zuyder Zee, in Holland.

Old Admiral Duncan had exhausted his curiosity about Texel. He had been doing nothing else, for more than two years, but gaze on this level patch of land and on the waters surrounding it. On the deck of his forty-gunner, the Venerable, he had spent winter, summer, autumn, winter, summer, autumn, peering through a glass on the Zuyder Zee, from a point of observation off the Texel.

He came there in February, 1795, a month after some French hussars captured the Dutch fleet. Horse soldiers are not usually employed in riding out to sea and taking battleships by storm, but the French revolutionary army had invaded Holland and caught the Dutch fleet fixed in the ice. The hussars had ridden out, with horse artillery, over the ice and captured the ships.

Our country then became afraid of the use to which the Dutch warships would be put. The revolutionaries intended to pack them with soldiers and launch them against Ireland. This was why Admiral

Duncan settled by the Texel with a telescope and a powerful fleet within call. Yet when the critical day came, after twenty-seven months of weary watching and waiting, it found the gallant old admiral in a state of deep despair.

The Dutch had at last gone over to the French, and prepared a fleet for a last great struggle for that command of the sea which they had lost in the days of Cromwell. Behind the Texel they fitted out sixteen battleships and six smaller warships, under the command of Admiral De Winter. With this fleet they intended to fight Duncan's force.

But by May, 1797, Duncan had no force for them to fight. A general mutiny had broken out among our seamen at the Nore, and spread to the fleet off the Texel. Every British ship deserted the admiral, except his own flagship and a fifty-gunner, the Adamant. All the rest sailed to England to take part in the unhappy mutiny.

Duncan was heart-broken. As he said to his few faithful sailors:

To be deserted by my fleet in the face

THE LONG, LONG WATCH IN THE NORTH SEA

of an enemy is a disgrace which never before happened to a British admiral, nor could I think it possible. It has often been my pride, with you, to look into the Texel and see a foe which dreaded coming out to meet us. My pride is now humbled indeed. My feelings are not easily expressed. God bless you all!"

Tears rolled down the faces of the crew, and Duncan himself was deeply moved. But when he heard that the whole Dutch fleet was putting out to sea the dauntless old sailor refused to turn tail. He ordered the captain of the *Adamant* to anchor

his fleet—the fleet that did not exist! The Dutch read his signals, and, being unable to see that the North Sea was now empty, they thought the rumour of the mutiny and desertion of the whole fleet was merely a false report to lure them out. They gathered from the signals that Duncan had received reinforcements and was now overwhelmingly strong, and so the enemy remained in the harbour, and waited for a more favourable opportunity.

Then slowly the mutinous fleet began to return to their admiral, in the second week in June. First they came in single



ADMIRAL DUNCAN RECEIVES THE SWORD AND FLAG OF THE DUTCH ADMIRAL AFTER THE VICTORY OFF CAMPERDOWN

alongside of him in the narrowest part of the channel between the island and the mainland of Holland, and to fight his vessel till it sank.

"I have taken the depth of the water," said the gallant admiral, "and I know that when the Venerable goes down my flag will still fly."

Though the ship might sink, the topmast with the flag would stand out of the shallow sea! But, happily, it did not come to this; for, after anchoring in the channel, the clever old sea-dog signalled continually with flags, directing the movements of

ships, and afterwards in groups of ships. By the beginning of October, 1797, Duncan was strong enough to give battle, and his mutineers were burning for a fight to wipe out their disgrace and win back the confidence of their gallant admiral.

But the Dutch would not come out; the signalling had been rather too successful. Duncan, however, was as full of resource as the sea is of salt water. He now pretended that he was too weak to fight, and sailed away to Yarmouth, leaving a few small ships to watch what the Dutchmen did. On October 9 a fishing-boat brought the

THE CHILDREN'S TREASURE HOUSE

news that the enemy had come out into the North Sea. By noon that day Duncan got eleven battleships ready, and steered with a fair wind to his old haunt by the Texel. Later in the day three more ships joined him.

Finding that the Dutch fleet had sailed south to join forces with the French fleet at Brest, he followed it, and came up with it on the morning of October 11, 1797. The battle took place off Camperduin, on the Dutch coast. It is called Camperdown by the English, and it is famous as the last important struggle for power in the North Sea—up to the time when, in 1914, the British Grand Fleet entered on its great struggle with the German navy for the general command of the sea. The brave Dutchmen fought with their old

courage and tenacity, but their gunners were not mutineers passionately eager to redeem themselves in the eyes of a beloved admiral. So rapid, continual, and terribly well aimed was the fire of the British guns that the battle was soon over. More than half the Dutch ships surrendered, and the rest escaped only because Duncan got into shallow water close to the low Dutch coast. The captured ships were so badly injured by our gun-fire that they were like sieves, and were only worth bringing into port as trophies of victory. None of them was ever again fit for sea.

Admiral Duncan was made Viscount Duncan of Camperdown, as a reward for his long, patient, unwearying services to his country at Texel, ending in the glory of a great triumph.

Admirals and Gentlemen

IN the eighteenth century gentlemen fought like gentlemen, with a free manner and a happy air. At the battle of Fontenoy, between the French and English, Lord Hay advanced towards the French line, took off his hat with a bow, and said, "Gentlemen of the French Guards, please fire first." But a French officer stepped forth also and made a bow. "No, gentlemen of England," he exclaimed, "you have the first shot."

Admiral Zoutman was a man of this school. On August 5, 1781, he was in command of a Dutch squadron convoying some merchantmen across the North Sea. Across his path came Admiral Hyde Parker, protecting a large fleet of trading ships he had brought from the Baltic. The two admirals each had seven battleships and various cruisers, and both were spoiling for a fight, when they met at dawn over the Dogger Bank.

Parker sent his merchant fleet to England, and Zoutman told his to return to Holland. Then, having cleared the waters, the two old Dutch and British sea-dogs prepared for a lively tussle. Admiral Parker came on headlong, all sails set, getting things ready as he came.

But Admiral Zoutman did not like this bustle and go-as-you-please manner. On his ships everything was done in nice order. The hammocks and quarter-cloths were spread as if for a show in harbour. The marines were well drawn up, shouldering muskets, with the exactness of a review, and a last polish was put on the brasswork.

To this exceptional neatness the Dutch admiral added a still more remarkable

politeness. The British ships came almost end-on towards the Dutch broadsides, so that the British decks could have been terribly swept by gun-fire, while the British guns were unable to work. But Zoutman gave no signal to engage. The courtly, chivalrous old Dutchman wanted a raging, tearing, ship-to-ship, pounding battle, with nothing but his own seamanship and gunnery to tell on the result.

So he patiently waited until Parker had set his vessels broadside on and hoisted the red flag. Then he sent up his own signal to fire. In the meantime the British admiral found that he was not facing the Dutch admiral. Parker's flagship was the fourth ship in the centre of the line. Zoutman's flagship, instead of being in its proper place, was the fifth in the opposite line—a strange mistake for so precise and careful a warrior to make on such an occasion.

Parker disarranged his battle array in order to get opposite to Zoutman, throwing one of his rear ships out of the action for the time. Then, having done everything that etiquette demanded, the two old warriors hammered away for three and a half hours. No ship was sunk, but the Dutchmen, fighting gloriously to the last, bore away to the island of the Texel.

Both squadrons practically cannonaded each other to a standstill. For valorous onslaught the action was one of the most remarkable ever fought. The fighting was intense, fierce, and incessant; and the Dutchmen and the Englishmen liked each other much better afterwards, as gallant sailors so often do.



THE COUNTRY LANES OF ENGLAND

WE need not be dull in a country lane if we will but look about us and reflect upon the meaning of the things that we see.

If we hurry through it we catch no sign of life beyond a fluttering bird or two, but if we pause and quietly observe we may see for ourselves some of the commonplace wonders of the world—sights so common that the country child treats them as matters of course, yet really so strange and puzzling that great men, with all their learning, confess them mysteries which they are as yet unable to solve.

Flitting along the hedgerows, or trilling away in the meadow beyond it, are seen and heard little birds which have come to us from the distant lands that fringe the Mediterranean. How have they managed to fly so far, these little feathered things which seem to have no more energy than will carry them a few yards at a time?

Twice a year they are filled with a strength and power of endurance which no mighty engine made by man can equal. When they fly to us, and when they fly away from us in the autumn, these twittering morsels of life which we see around us and over our heads perform a feat of flight and a power of path-finding which man in vain seeks to imitate. They carry no store of petrol to keep them moving, no load of coal to keep their fires of life blazing. Just a thimbleful of food—grain, or buds, or insects—it is this tiny store that they convert into heat and energy for the enormous

feat of strength which has brought them into our country lane.

The mellow call of the cuckoo makes the little student remember that this strange bird, which has so many enemies that it dare not build a nest of its own, has one so-called friend—the wryneck, though country people hardly ever use this name, calling the bird cuckoo leader, or cuckoo friend, or cuckoo mate.

Wrynecks and cuckoos arrive in England at the same time, and when and where we find the one, we may always expect to find the other. They are both valuable birds to the farmer and gardener, living upon caterpillars and other insects harmful to crops. The cuckoo makes no nest at all, and the wryneck does not take much trouble, as we may see if we step out of the lane into the adjoining orchard, where we find his nest to be merely a hole in a tree, the rotting wood itself serving for bedding. We call the bird wryneck because of the curious manner in which it twists its neck when seeking for insects.

We leave this relative of the woodpecker to his caterpillars, and fix our attention upon a bold-looking bird with a down-curved beak which we see perched upon the top of the high hedge. As we quietly watch, it descends into the grass and as quickly returns, bearing in its beak a large grasshopper. We gaze with breathless interest as we see the bird deliberately fix the dead insect upon a thorn near its nest. Can this be an accident, or

the chance act of a moment? No, by looking closer we see other insects fixed in the same way round about the nest. This, then, is the famous red-backed shrike, or butcher-bird. Here is a bird only seven inches in length, three inches less than a blackbird, yet as fierce as a little eagle. It kills all sorts of insects, but takes mice and little birds as well, and, hanging them up on spiky twigs, as a butcher hangs up joints of meat, gets the name by which it is commonly known.

THE TRAGEDY THAT GOES ON IN EVERY COUNTRY LANE

It is rather a terrible idea that a little bird of our common hedgerows should kill and eat other birds; stranger still that it should practise this extraordinary art of using tools, as it were, to help in eating them. We might imagine from this latter consideration that the red-backed shrike is a bird of superior intelligence. Yet it is no wiser than our other birds. It is one of the birds which the cuckoo manages to deceive. We might almost say that this bird, which goes to other nests and tears the little nestlings from their beds, to kill and eat them, is justly punished by the fact that every year the red-backed shrike is the victim of a tragedy in its own nest.

In many a butcher-bird's nest the cuckoo places her eggs. The young cuckoo, as it grows up, thrusts out the shrike's eggs or the little shrikes, fills the nest itself, and receives the whole attention of the parent birds. And the shrikes, which are clever enough to make use of tools in their larder, are so stupid as either not to realise the deception or to allow the enemy to remain. Every year some of the slayers of other birds are punished by having their own young slain in order that a young cuckoo may be brought to maturity; and this double tragedy is going on every summer in this quiet country lane through which we are passing.

MASTER BULLFINCH AND THE FRUIT-BUDS

As we resume our walk, a bullfinch flies away from a fruit-tree, and we wonder what mischief this handsome little rascal has been at. Presently a chaffinch rises, too, and we look with suspicion at this beauty also. These two birds are serious enemies to the orchard when the trees are in bud. They eat an enormous number of fruit-buds, and it appears that they destroy still more, with the same sort of instinct, it would seem,

with which a fox will slay—not for the mere needs of appetite, but, seemingly, for the wicked delight of killing. We know that this is true, from inquiries which have been officially carried out concerning Master Bullfinch. Twenty-three of these birds were shot so that the contents of their stomachs might be examined. Eight of them were shot while actually destroying fruit-buds, but there was not a fruit-bud in the stomach of one of them. These eight had all eaten their fill of the seeds of the sycamore, and had then set to work to destroy the fruit-buds.

That is disgraceful, of course, so what can the bullfinch say in his defence? He could make a fairly satisfactory answer, and that is that he eats an enormous number of the seeds of a detested weed called self-heal, and the seeds of the dandelion, of nettles, and other unpleasant things. And the same defence is offered on behalf of the sparrow. He consumes a vast number of the seeds of weeds. We had better not look into the other side of the account against him, or his character will rule him out of favour.

THE CHAFFINCH IN THE ORCHARD AND THE RABBIT IN THE ROAD

We must put the case for the chaffinch as fairly as we can. He is a foe to fruit-buds, but when his young ones are in the nest, he collects for them numbers of moths, caterpillars, weevils, and earwigs. He really does good work for us, so shall we agree to pay him in fruit-buds? He robs us of buds which would become cherries, apples, pears, or plums, but he gobbles up the caterpillar of the winter moth, which, left unchecked, has been known to reduce a Kentish orchard, in the height of summer, to the leafless condition of mid-winter.

The truth is that we cannot touch the bird problem without involving weighty considerations of another kind. If only the stupid men who preserve game for shooting could be made by law to spare the hawks and other birds which prey upon the smaller birds, Nature would keep the balance correct, and we should have enough, but not too many, bullfinches, chaffinches, sparrows, blackbirds, starlings, and thrushes.

But while we have been holding this solemn little discussion with ourselves, out pops a wild rabbit from the field on the other side, skittishly crosses the road, then, hearing our step, scurries like mad through the hedge on our right. We walk

A MIRACLE THAT HAPPENS BEFORE OUR EYES

There is a wonderful thing that happens every day in some country lane, when a strange-looking thing crawls out of the mud of a pool, comes up to the surface of the water, and rises into the air, unfolding itself in the sun until it flies away on glorious wings—a lovely dragon-fly. Lord Tennyson saw it one day, and this is how he told the story:

To-day I saw the dragon-fly
Come from the well where he did lie,
And under impulse rent the veil
Of his old husk; from head to tail

Came out clear plates of sapphire mail.
He dried his wings; like gauze they grew;
Through crofts and pastures wet with dew
A living flash of light he flew.

These photographs, taken by Mr. J. J. Ward, show a dragon-fly coming into the world.



The pupa leaves the water



The skin cracks



The head appears



The fly frees its legs



In 3 minutes it has almost left its case



After 18 minutes it raises its head



It releases its tail and leaves its case



The wings dry and begin to unfold



Two minutes later the fly is like this



And like this in 6 minutes



After resting a few minutes, it can move its wings



And is ready to fly like a king of the air

to where he went, and see that there is a little gap through which he has run, round and neat, where he has made his way many a time. He has no right in this part of the neighbourhood, we realise at once, for there is wire netting here and there, showing that it is desired to keep him out. Here is another troublesome beauty, as full of mischief as he can be.

But about rabbits; we are less fortunate than a gentleman who this spring saw one pretend to be dead. He came upon it suddenly, and the rabbit stretched itself out stiff, as though lifeless. The watcher hid behind a tree, and the rabbit, rolling itself down a little slope, remained with its legs outstretched, motionless, for ten minutes. Then it seemed slowly to recover. It sat up, gave the danger-signal—a thump with its hind legs—and skipped off home. The watcher believes that the rabbit was feigning death, just as a fox or an opossum or a spider is said to do.

But this brings us to another mystery of Nature, in which it is probable that men have all this time been deceived.

DOES AN ANIMAL PRETEND TO BE DEAD?

There seems good reason to believe, from recent discoveries, that what we have all thought to be shamming is no shamming at all—that startled animals are really brought to a condition resembling death. Human beings under stress of great excitement, brought about by fear or joy or grief, faint, sink into a condition which for the time being resembles death. Now, it is believed that animals are affected in the same way.

It seems probable that when a horse which is being driven, or a bullock which is being taken along the road, or a sheep, or any other animal frightened by harsh treatment, suddenly turns what we call sulky, it is not sulky at all, but terrified or excited into a sort of trance, a condition in which the brain becomes paralysed and all the muscles of the body rendered useless.

This quite alters our view of the supposed cunning of the fox and the opossum and the spider in pretending to be dead. It accounts, too, for the fixed determination with which a nesting bird cowers down, motionless, upon its eggs when we suddenly appear before its nest. It accounts, also, for the difficulty with which the fleet-footed rabbit runs from the deadly but slow-running stoat.

If a rabbit becomes paralysed from fear at the approach of a stoat, surely the same terrible feeling will affect it when a man approaches it in such a way that the little animal cannot escape.

THE POOR CORNCRAKE THAT DIED FROM TERROR

There is the harsh, grating cry of the corncrake away in a harvest-field up the lane, and as we walk towards the sound we may well ask, as Wordsworth asked of the cuckoo, whose note he so loved:

Shall I call thee bird,
Or but a wandering voice?

for we know that we shall never get near this bird. It is only a voice to us, and a very wearisome, monotonous voice if the field should lie within hearing distance of our bedroom. Perhaps it is as well that we should not get too near, for this hiding, elusive bird has the deadliest terror of man. Quite recently a gentleman surprised one and followed it out into the open. The bird ran swiftly, but he kept it in sight. Seeing itself still pursued, the bird sank down into a sitting posture, and did not move. The gentleman waited for half an hour, then got up and moved slowly forward. Still the bird did not rise, and he walked up and touched it. The bird was quite dead! He took it home and examined it, and found that it had been perfectly healthy in every respect; it had sunk down with terror and died where it sat.

So we leave our corncrake unsought, and pass on to a part of our lane along which runs a jolly little ditch. Every country lane in the world should have its ditch.

THE JOLLY LITTLE DITCH AND THE TADPOLES

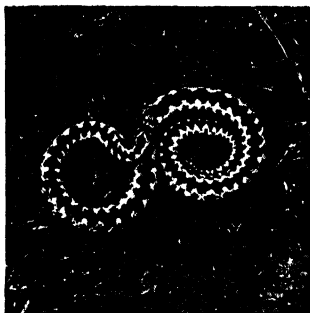
Let us sit down to enjoy the spectacle. This is a marvellous little world of life—huge water-beetles, which come darting up to the surface, turn head downwards, thrust their backs into the open air, breathe in this way, then hurriedly descend again; jolly, darting little water-boatmen, which seem to enjoy life more than any other insect; funny little water-spiders, and, of course, a happy family of little long-tailed frogs. We are only just in time.

In another day or two these merry little creatures will have left the water. At first they are like fishes, finding all the oxygen they need in the water which washes over their gills. Then comes the stage in which the gills are diminishing and the proper lungs forming. In

STRANGE VISITORS IN A COUNTRY LANE



A SLOW-WORM AND YOUNG



AN ADDER, OR VIPER



THE COMMON GRASS SNAKE



THE COMMON BROWN RAT



A STARTLED WEASEL



A SAND LIZARD ON A BOULDER



A RABBIT RUNNING ACROSS A LANE

this condition they need the oxygen of the air to breathe, and so they are constantly popping up to the top of the water to thrust their little heads out into the open air. But now the time is coming when they must breathe the air alone. They must leave the water. That is why, when we rear tadpoles in an aquarium, we must give them a way of escape when the proper time comes.

As soon as they gain the true frog form, and their tails begin to disappear, they want to leave the water and to find food on land. If they cannot, they will become so feeble that they will actually drown. True, they pass the winter down at the bottom of the water, but in the meantime they have fed well on land during the summer months, and in its winter sleep an animal requires no food.

THE SILVER WAY OF THE SNAIL WITH 14,000 TEETH

Silvery trails along the grass now attract our attention from the ditch, and we know at once that a snail has been parading here when we were in bed. Most people shudder at the thought of a snail, yet this track which it leaves behind it gleams with all the hues of mother-of-pearl. The snail makes its own path on which to take its silent way. We call that pathway slime. Well, it is some secretion such as that of which the oyster makes its pearl; a somewhat similar secretion becomes the silk of the spider's web, or the castle of silk in which the silkworm encases itself. For the snail's cousin, the slug, it is hard to pretend to have any respect. It is an unpleasant thing to handle, for, if it has any shell at all, it is so small that we cannot handle the slug by it, but must pick it up, cold and slippery, in our fingers. The only way in which we can work up any interest in the snail or the slug is to keep one of each and see them feed upon cabbage-leaf or other vegetable matter, which the snail breaks up with its 14,000 teeth.

THE SNAIL'S WONDERFUL HOUSE & THE DRAGON-FLY'S WONDERFUL WINGS

We can admire the snail, however, if we have patience, as a winter architect. The way in which it builds itself into its snug house is splendid. The gummy secretion which it puts forth sets as hard as cement, and there is not a better-protected animal in the world than a snail in its winter home, shut in from cold and wet by layer upon layer of fine earth sealed with its own wonderful glyue slime.

Whiz! What is that darting like a gleam of light across the pool into which our ditch widens? There can be no mistaking that flashing, brilliant insect. It is a dragon-fly, one of the few insects of which Great Britain has specimens as brilliant as those of tropical lands. It is rather a jump from snails and slugs to this winged express of the air. Other insects would be glad if the jump were not so rapid, for there is no escaping these winged dragons. They fly with such terrific speed, and they are so hungry, that the lesser flies upon which they live dart and dodge in vain. The dragon-fly's sharp jaws has them.

How strange, then, to think that this beautiful creature, with its gleaming colours and its amazingly rapid, powerful wings, has to come out of that muddy pool! In those stagnant depths it has spent its infancy. Laid in the water as an egg, it has passed through various stages of humble life, not so highly organised as a tadpole. In this stage of its life it breathes and swims by one and the same act. Taking in water at the mouth, it passes it through its body, so that the water comes out at the back through a network of breathing vessels, by means of which the oxygen is extracted from the fluid.

THE UNFOLDING OF THE WINGS THAT FRIGHTEN THE INSECT WORLD

The water, in passing from the insect's body, drives the insect forward, so it is breath and oars to the dragon-fly baby. But the fly does not live upon water. It is armed with flexible nippers, which it can shoot out to catch any water insect near it. When the last of the series of moults which it has to undergo is about to take place, the dragon-fly knows by instinct that the change is coming, and for the first time in its life it leaves the water. It climbs up the stem of a plant, and rests in the open air.

Presently its outer shell splits open down the back, and out, limp and feeble, crawls the little insect king of the air. Slowly it dries, its great gauzy wings are unfurled, and, lo! before our eyes rises this cruel beauty which terrorises all the rest of the insect world.

This last thought is in our mind as we turn back from our walk for tea, and, thinking of plant life for a moment, we pause to look at some fungus which is growing upon a tree that overhangs our head. How can that feeble growth have

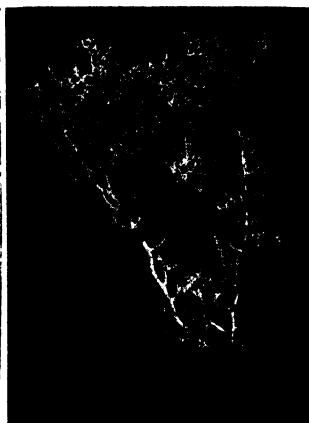
THINGS THAT GROW IN COUNTRY LANES



THE PRETTY CUP LICHEN, SHOWN THE SAME SIZE AS IT GROWS



BULRUSHES



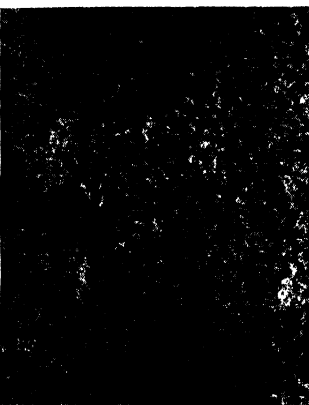
REINDEER MOSS



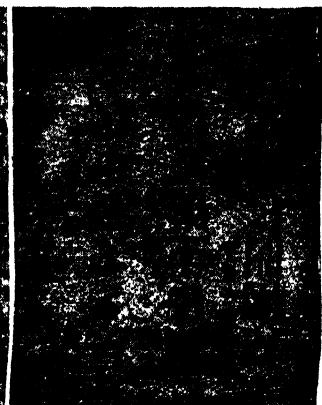
RUST ON BARLEY



ROSE GALLS



THE WRITING LICHEN—LIKE



A JAPANESE NEWSPAPER

Writing lichen, found on trees and stone, looks strangely like Japanese printing, shown side by side with it above.

made its way to a place to which we, strong and active as we are, should find it difficult to climb? An instant's thought supplies us with the answer. The fungus gives off myriads of spores, or seeds, each one capable of forming a new fungus. These, when the parent plant breaks, are carried by the lightest puff of air, to grow in any suitable spot. Decaying wood is a favourite habitation of fungus, which can flourish where other growths would find no means of life. There are thousands of forms of fungus, some of them very injurious and very costly to man. Walk through a greenhouse where chrysanthemums are grown. You notice that the plants do not look quite healthy, but cannot say what ails them. But the

gardener turns up a leaf and, pointing, says "Rust." Yes, there it is, the deadly rust, a brown, powdery fungus whose spores fly off from leaf to leaf and spread over the plants right through the house. It almost seems as if the horrid growth has intelligence. If it occurred on the upper side of the leaf it could easily be dealt with, but it does not appear on the top. It lurks on the

under side, where it cannot be readily treated with the things used to kill it. All the rusts of the vegetable world are funguses, the wheat rust and the rust which attacks the coffee plant among them.

But nothing in Nature is wholly bad, not even the fungus. Funguses slay millions of our deadly enemies, the flies, every autumn; but they do something more than this. If they damage our chrysanthemums and corn, they make up by preparing new soil for man. Look at that lovely lichen on yonder tree-trunk, and upon that barn wall. Do we realise that the lichen and all other lichens are at heart funguses, that there is one of the greatest marvels in the whole realm of Nature going on there?

The beautiful lichen is not a single plant; it is a collection of plants, all rendering obedience to a master plant, which plant is a fungus. A great botanist named Schwendener, who studied the life-history of the lichen, has told us a fascinating story of it. "These lichens," he says, "are not simple plants, not individuals in the ordinary sense of the word; they are colonies, consisting of hundreds of thousands of individuals, among which, however, one rules; while the rest, in perpetual captivity, prepare the nutriment for themselves and their master. This master is a fungus, a parasite which is accustomed to live on others' work. Its slaves are green algae, which it has sought out, or, indeed,

caught hold of and compelled into its service. It surrounds them as a spider surrounds its prey, with a fibrous net of narrow meshes, which is gradually converted into an impenetrable covering. But while the spider kills its prey, the fungus encourages the algae to more rapid activity and to more vigorous increase." The humble algae take up food in the ordinary way



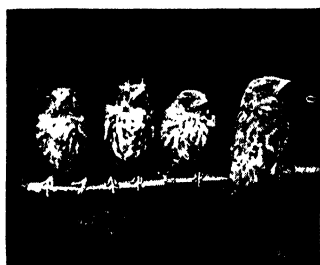
A wonderful photograph of a young cuckoo throwing an egg out of a meadow-pipit's nest in which it has been hatched.

from the air and soil, and convert it into a condition in which the king fungus can eat it.

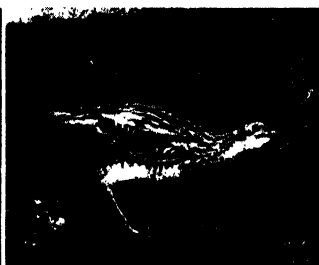
But while the fungus is thus making slaves of other plants, it is working for the good of man. It is slowly eating its way into rocks, rotting wood or whatever else it may be growing upon. It is slowly, very slowly, helping to convert rock and rotting wood into rich soil which will yield food for future generations of human beings; and so it is helping, in its own strange way, to make a country lane a lovely place to walk in.

At last our walk is ended, and we are at home again, realising that in the seemingly humdrum lane there is more of wonder and romance than in many a crowded street.

BIRDS SEEN IN A COUNTRY LANE



YOUNG LINNETS



LANDRAIL



YOUNG BROWN OWLS



CORNCRAKES HATCHING



A CORNCRAKE ON ITS NEST



YOUNG RED-BACKED SHRIKES



MALE AND FEMALE CHAFFINCHES

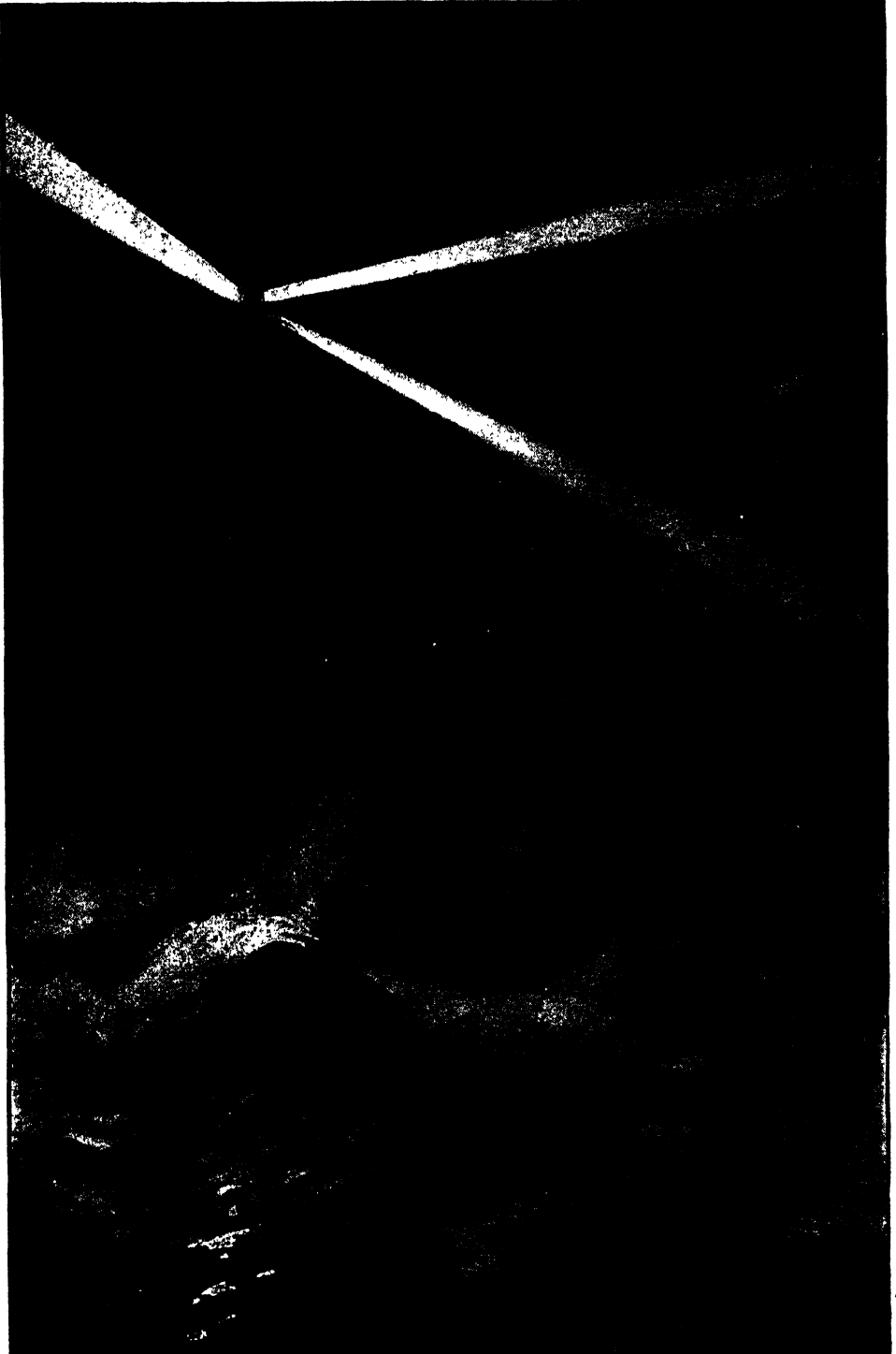


A GROUP OF YOUNG ROBINS

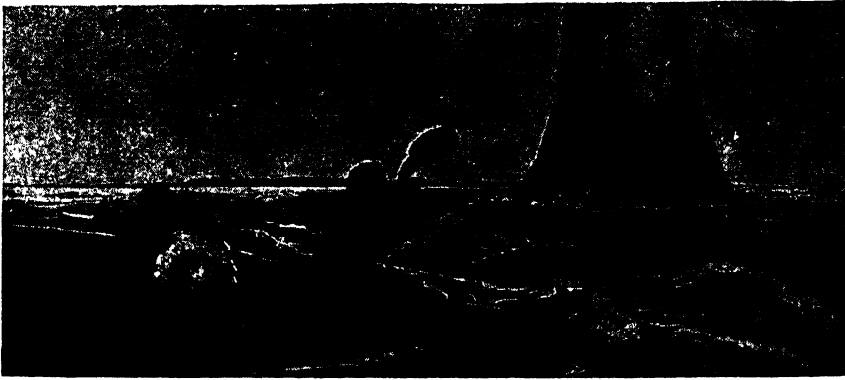


A LONG-EARED OWL IN A TEMPER

THE LIGHT OF SIXTY MILLION CANDLES



The wonders of a lighthouse light are quite beyond our comprehension. Its beams shine or flash out across the darkness so that the mariner can see them, in some cases, while he is between thirty and forty miles away; and in some of the latest lighthouses the light given out from the lantern is equal to as many as sixty millions of candles.



Saluting the Lighthouse Keeper—from the painting by Thomas Graham

THE LIGHTS AROUND THE ISLAND

SAILORS say that there is a little cherub sitting up aloft in their rigging to keep guard over Jack Tar. The real guardians of those who go down to the sea in ships are the brave fellows who man the lighthouses.

Ships passing outward to sea, or inward to port, are guided on their way at night by the beams flashed from these lighthouses, or warned to steer clear of the dangerous rock upon which the lighthouse stands. In fair weather and in foul the lighthouse casts over the sea its unspoken message of guidance, encouragement, and warning. It seems like some unfailing machine, and few people can realise that in that lonely watch-tower are men imprisoned, week after week, perhaps month after month. It is a man who lights the lamps and keeps them burning, but he is so removed from the everyday affairs of life that he is hardly ever included in the company of heroes to which he belongs.

There are three sorts of lighthouses. There is the one built on land, the keepers of which live on shore, having their houses and gardens and the company of their families, like other men. Then there is the lighthouse built near shore, which, except in very bad weather, can be reached with ease by boat. The third class is the rock lighthouse, built far out at sea upon some deadly obstruction on to which ships, but for the lighthouse, would rush in the darkness to their

doom. These are the lighthouses in which the nerve and heart of a man are most tried, in which there is the highest call for that heroism which exhibits itself in quiet, courageous endurance.

Such a lighthouse has four men attached to it, of whom three are always in the lighthouse together; the fourth is on shore ready to go off to relieve one of his mates when his time comes round. Two months on duty, one on shore, that is the rule for posts such as this. When a man goes on duty he is taken off from shore in a vessel, which approaches as near as it can, then lowers a boat, in which the man is rowed to the lighthouse. He may be able to land on the landing-stage of the lighthouse, or he may have to climb from the boat up a ladder of rope let down from the lighthouse to him. The latter is the commoner form of gaining an entrance.

When he reaches the lighthouse, our hero knows that he is saying farewell to the outer world for at least two months. But he knows also that it may be three months or even more, in the winter season, before the stormy waves will let him out of his prison. These rock lighthouses are set in dangerous places, therefore it is only in time of comparative calm that the relief ship can approach to carry stores, and to take the man who is to go on duty in place of the man who is waiting to come off.

If the lighthouse is near shore, the men may be able to exchange signals by means of flags with their friends on land ; or they may be able to telephone. But neither of these courses is possible with the distant rock posts. A man is absolutely shut off from the rest of humanity, certainly for two months, probably for more. It was only the other year that the men in the lighthouse on the Chickens Rock, though not more than two miles from the Calf of Man, were kept prisoners for twelve weeks and a day. The man whose turn it was to be relieved was able to communicate for a time with friends on land, though storms made it impossible for any boat to draw near the lighthouse. To add to the agony of this isolation, the unhappy man learned that his little daughter lay seemingly at the point of death. The poor father passed days and weeks of agony of mind, but when at last the storms died down and he was rowed ashore, the first person to meet him was his little daughter, completely restored to health.

LIGHTHOUSE MEN WHO DISAPPEARED

Only men of exceptional character are chosen for these distant posts. They undergo a long training on land, in the management of the machinery which controls the lamps, and in all the routine of lighthouse duty ; they are taught to cook, to sew, to keep house, for there are no women to cook and mend for them in the lighthouses. When they have had all this training, they are sent from place to place to the less lonely lighthouses, until they are finally qualified for the more isolated ones.

There may be more than three men in the big lighthouses where there is machinery to manage for the production of gas or electricity, for the winding of clocks, the manipulation of the lamps, and so forth. There are never too many. Not very many years ago the three men of the Flannan Lighthouse, in the Hebrides, disappeared, and to this day we can only guess their end. For several nights the lamps were seen to be unlighted, but nobody could approach, owing to a storm.

When the storm passed away, the light still failed to shine. Men went off in a boat, but not one of the lighthouse crew could be found. The men have never been found. Two hundred feet from the brow of the rock on which the lighthouse is built there is a recess, cut for the reception of lighthouse ropes and

implements. It is supposed that the three men, seeing these latter in danger of being washed away by the storm, went down to make them secure, and were themselves swept to death.

That shows us the necessity of having as many men as possible, and now there are always three men at a time in the very lonely lighthouses. But, with this number of mouths to feed, the food problem sometimes becomes acute. Not many years ago, a ship calling by chance at Percy Island, off the Australian coast, found the lighthouse men starving, with the rest of the island population. Food should be sent out by ship four times a year. Somebody had forgotten, and the lighthouse men, when the ship arrived, were almost delirious with want.

THE CURE FOR A DULL LIFE

Now that wireless telegraphy is playing such an important part at sea, there ought not to be a single lighthouse in the whole of the British Empire without this important means of communication.

Men sometimes go mad in lighthouses, but this is more rare now than formerly. Trinity House, which is the lighthouse authority for England, acts as well as possible to its men ; so do the lighthouse authorities of the rest of the kingdom. The men are well supplied with food—mostly of the preserved sort. They have a library, the books of which are changed every time a relief ship arrives. But the best cure for melancholy in the lighthouse is work. There is plenty of that, and the men are thankful for it. It is splendid work, guarding the lives of men and women and children at sea, helping forward the prosperity of the country by safeguarding the ships which carry our important commerce.

THE MARVELLOUS LAMP

There is much to do. There are the meals to prepare, the washing up to see after, the living quarters—kitchen and sleeping berths—each in their separate storey, to keep neat and tidy. But the chief thing is the lamp. There are several forms of lamp—electric, gas, incandescent, oil. Petroleum converted into gas, and burnt with an incandescent mantle, appears to give the most useful light. The electric light dazzles and sometimes misleads in fine weather, and in foggy weather cannot be seen at a distance. The oil used is carried to the lighthouse by ships, and hauled up in

great iron vessels by means of a crane. The light given by the lamps is equal in some cases to millions of candle-lights. The power of the flame, of whatever character, is enormously intensified, either by silvered reflectors, which cast all the rays of the light in one beam over the sea, or, in the other system, by means of prisms and lenses, through which the beams are made to pass, and to combine in one vastly powerful stream of light.

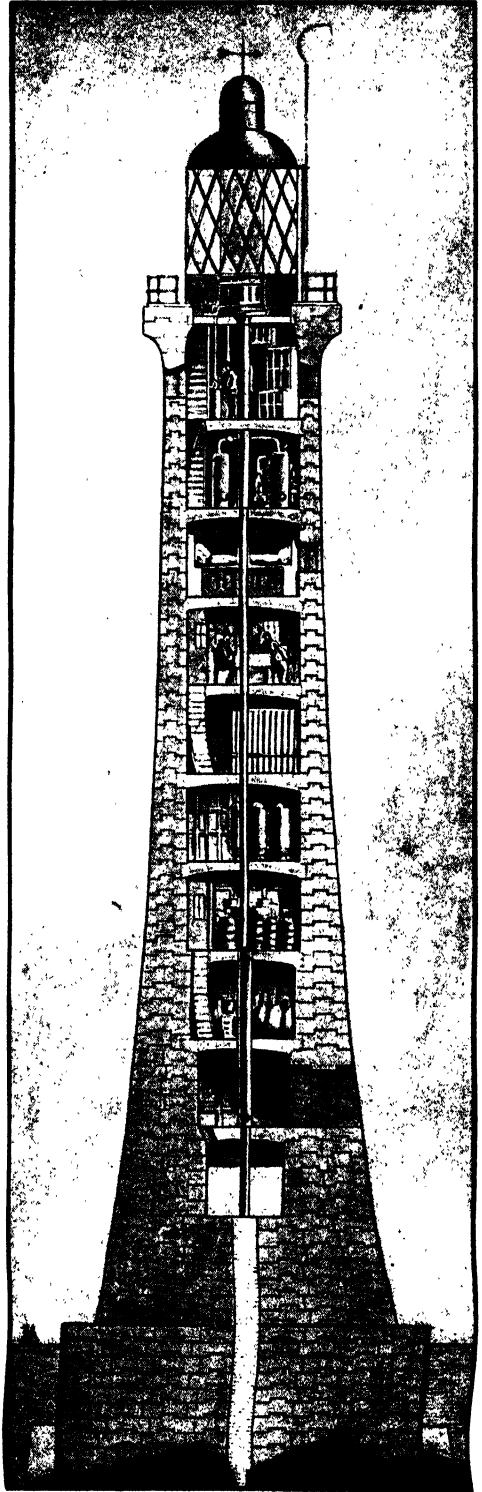
THE LIGHTHOUSE SIGNALS

Each lighthouse has its system of signalling. It would not do for the light to remain stationary, as it might then be mistaken for the searchlight of a ship or the light of some other lighthouse. Some lights are automatically extinguished and relighted every few seconds; others are caused to change colours at stated intervals; others turn round so as to be seen first dimly, then more strongly, then at the full, then with decreasing power. The sailors have books which tell them the meaning of all these systems. For the lighthouses do not merely form a warning against some deadly rock; they are signal-posts by which the mariner finds his way, just as the signals on the railway are guide-posts to the engine-driver as he flashes along the line. There are nine or ten systems by which the message of the lighthouse is conveyed, and each system can be divided up into many variations.

It is the duty of the lighthouse men to keep these lamps always trimmed and ready, and to be prepared at a moment's notice to substitute the light of duplicate lamps should one happen to fail.

RUNNING ROUND THE LANTERN

In case of fog, a great warning-bell or a foghorn is sounded, and these horns are sometimes so huge that they are worked by engines. Should a ship be seen in distress, the lighthouse men must send up a rocket to call out the lifeboat. They have to keep a careful record of all the weather changes, and of every incident of importance which they note at sea. There is always something to keep them busy, and when the men off duty have nothing to do in the lighthouse, they take exercise by running round and round the gallery which encloses the great lantern. One man has been known to take a journey of ten miles in a day in this way, to get rid of the monotony of the time when ships and boats could not approach.



Inside the Eddystone Lighthouse: looking down we see the lantern, service-room, engine-room, bedroom, living-room, two oil-rooms, two storerooms, entrance-room, and water-tank. The stones are dovetailed together.

WHAT A LIGHTHOUSE IS LIKE INSIDE



This is the living-room of a lighthouse, in which the men take their meals. It is fitted with a cooking-stove.



Here is the hospital, or medicine-room, of a lighthouse. The keepers, of course, have to doctor one another.

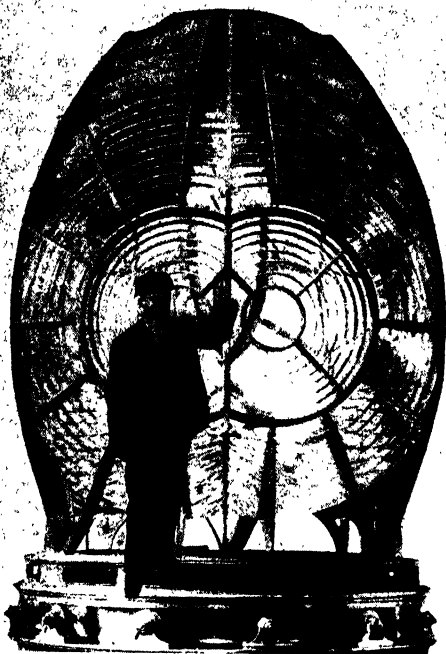


In this picture we see the office of the lighthouse. It is here that the records are made and kept, and reports prepared. The keepers usually have a library, a gramophone, and other things to amuse them in their lonely hours.

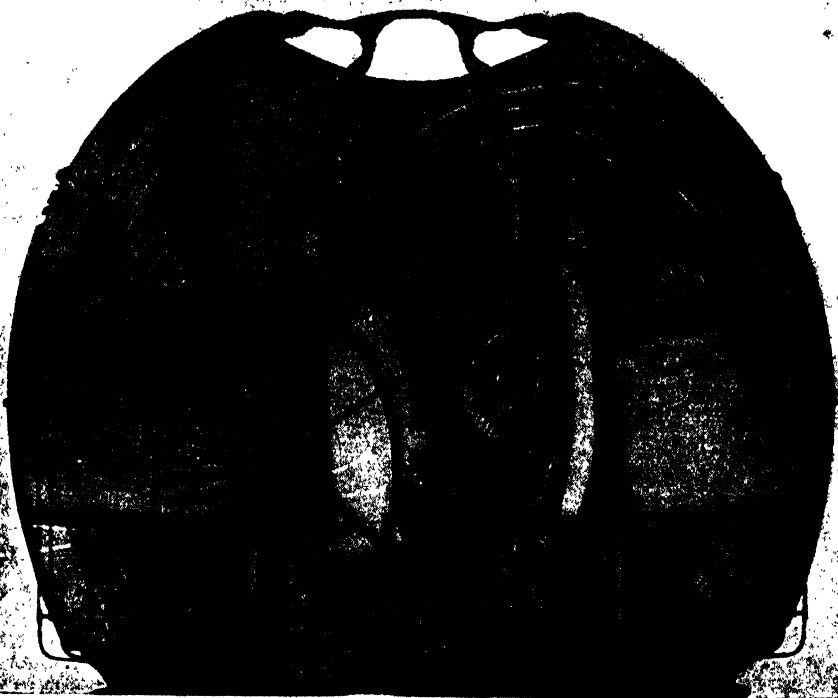


The bedroom is comfortable, and, as can be seen here, the beds are arranged round the room something in the style of a ship's bunks. Everything is done in a lighthouse to make the best use of the limited space available.

THE SHINING WINDOWS OF A LIGHTHOUSE

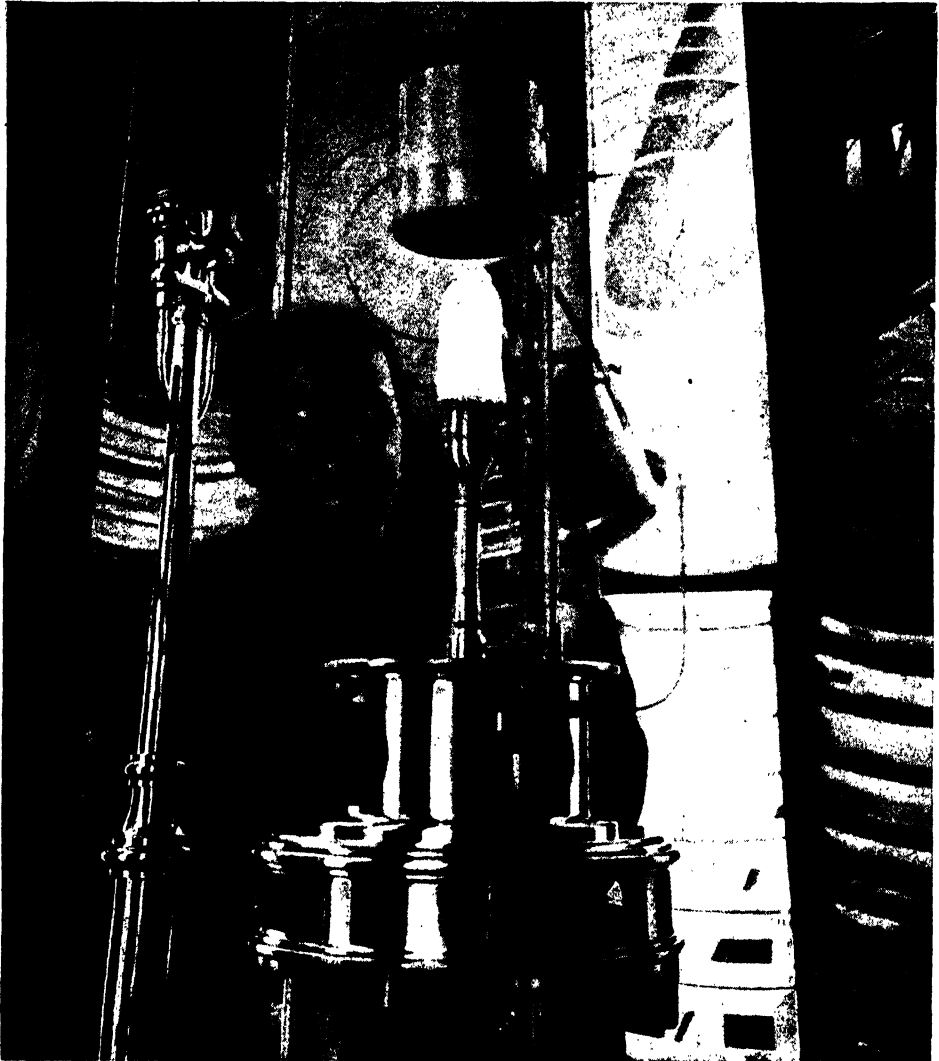


The most wonderful improvements have been made in recent years in the lighting of lighthouses. Not only have the lights themselves been made thousands of times more powerful than those formerly used, but marvellous lanterns, like those on this page, made up of complicated lenses, increase the power of the light many thousands of times.



These lanterns are of enormous size, and consist of wonderful prisms and lenses and reflectors, the making of which costs many hundreds of pounds. An up-to-date lighthouse costs anything up to £150,000 to build and equip.

THE MEN AT WORK IN THE LIGHTHOUSE



There are always three keepers in a lighthouse on a rock, and their work is tremendously responsible, for should they allow the light to go out only for five minutes many ships might be wrecked. Here we see the keeper in the daytime getting the lamp ready for night. The greatest care has to be exercised to keep the light brilliant.



The lighthouse-keepers not only have to see that their lamps burn brightly at night, but, as the man is doing in this picture, they keep a sharp look-out by day for vessels in distress and for any fogs that the wind may blow up.

THE GREAT HORN THAT SOUNDS AT SEA

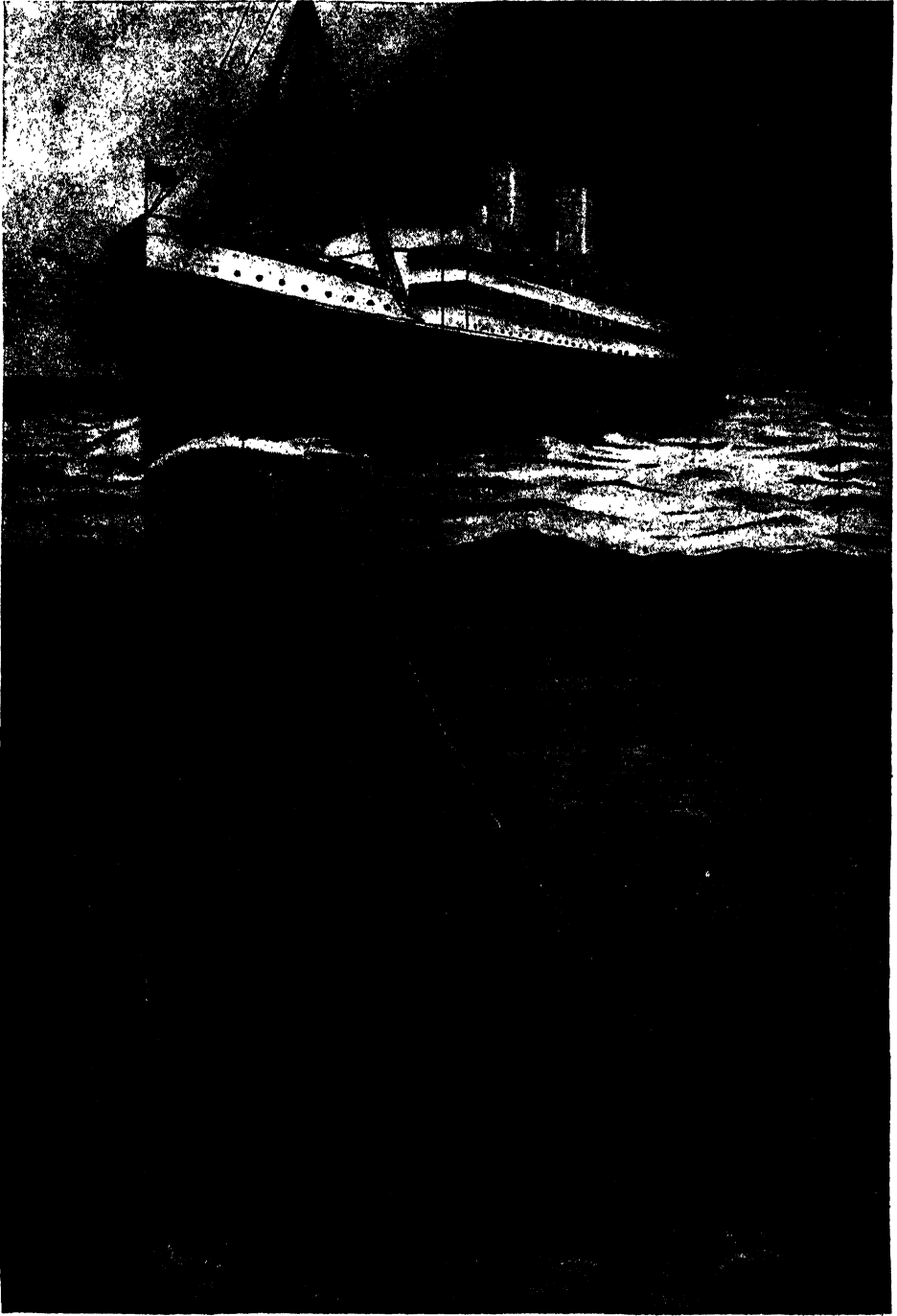


To warn ships in foggy weather there is a foghorn, or siren, and in some lighthouses three great gas-engines like that on the left are used to blow the horn. The man on the right is recording the time during which the foghorn is sounded.



Here is a monster foghorn for a lighthouse, one of the largest size that is made. It can be heard for miles, and is built upon an elaborate scientific principle. The horn itself is, of course, to increase the sound made by the siren. The pictures on this page and on page 97 were taken at the lighthouse works of Messrs. Chance Brothers, Ltd., by whose courtesy they are published.

THE BELL THAT RINGS UNDER THE SEA

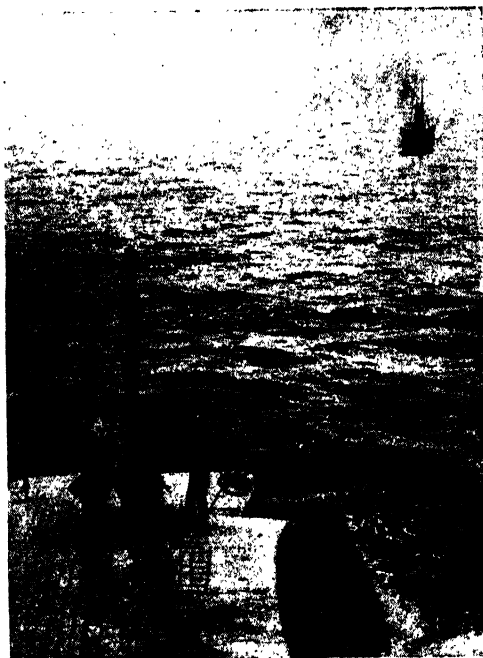


This picture shows one of the various ways of warning a ship in foggy weather. By means of electricity passing through the wire, the lighthouse-keeper rings a bell under the sea. The ship has inside its hull on each side a microphone, which collects the sound of the bell as it passes through the water in the direction of the dotted line, and magnifies it. A wire connects each microphone with a telephone receiver in the wheel-house on deck, and by turning his ship until he hears the bell equally loudly from each microphone, the captain is able to point his ship straight towards the bell. His chart marks the position of the bell, and he is thus able to know exactly where he is.

CHANGING GUARD AT A LIGHTHOUSE



Life on a lonely lighthouse is very dull, and the men look out keenly for the approach of the relief ship.



The ship is unable to approach very near to the rocks, and the men have to row from the ship to the lighthouse.



When the boats get near the rock on which the lighthouse is built, it is often impossible for the men to land in the ordinary way, and they have to be hauled up, as shown in this picture. In stormy weather this is very dangerous.

THE STORM THAT BEATS ON A LIGHTHOUSE



The storms that beat against a lighthouse are terrible in their power, and communication, even by a life-line, as seen in this picture, is often cut off for weeks together.

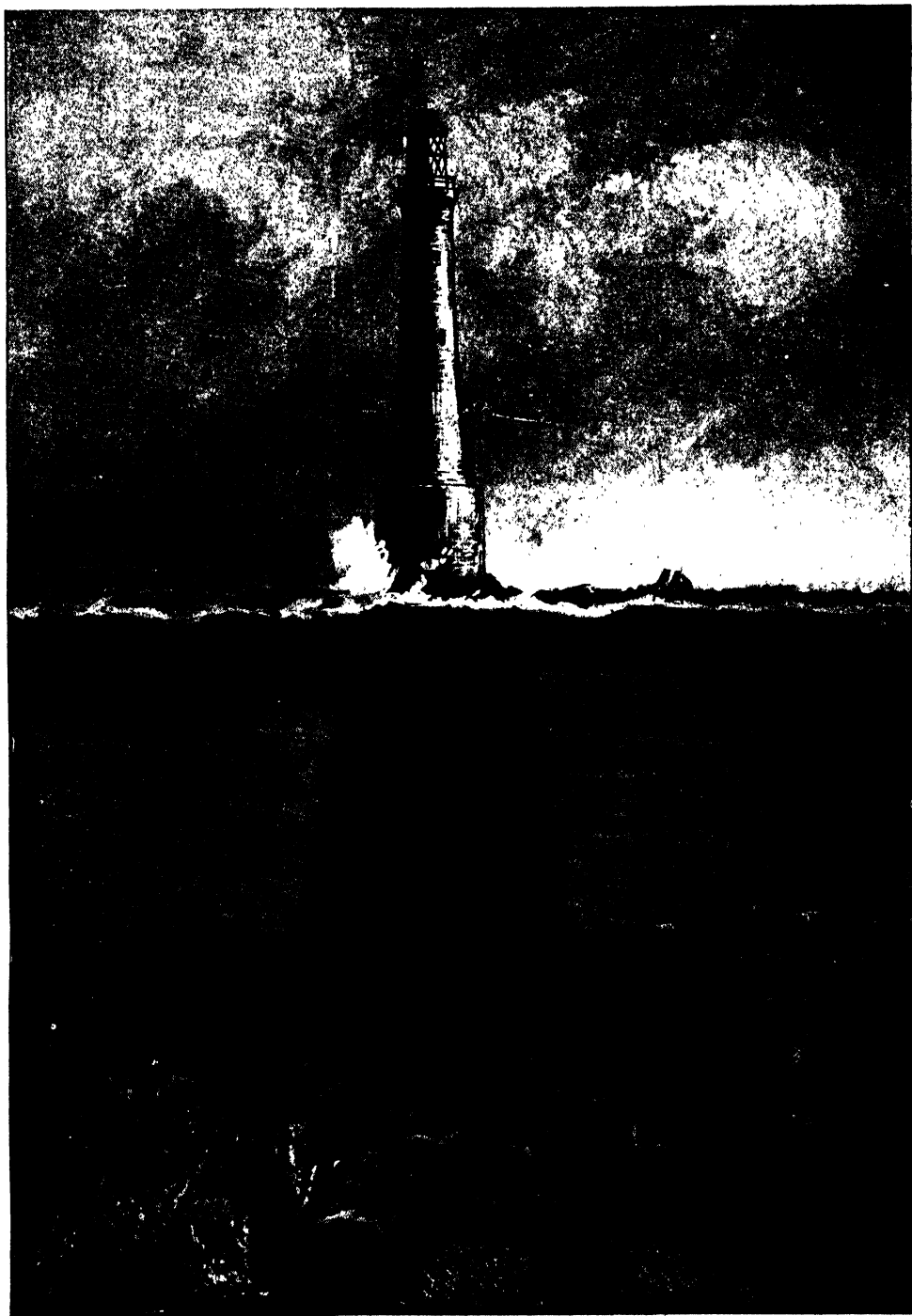


The snow and ice collect upon the glass of the lantern, and, at the risk of being blown away by the terrific winds, the lighthouse-keepers have continually to wipe it off.

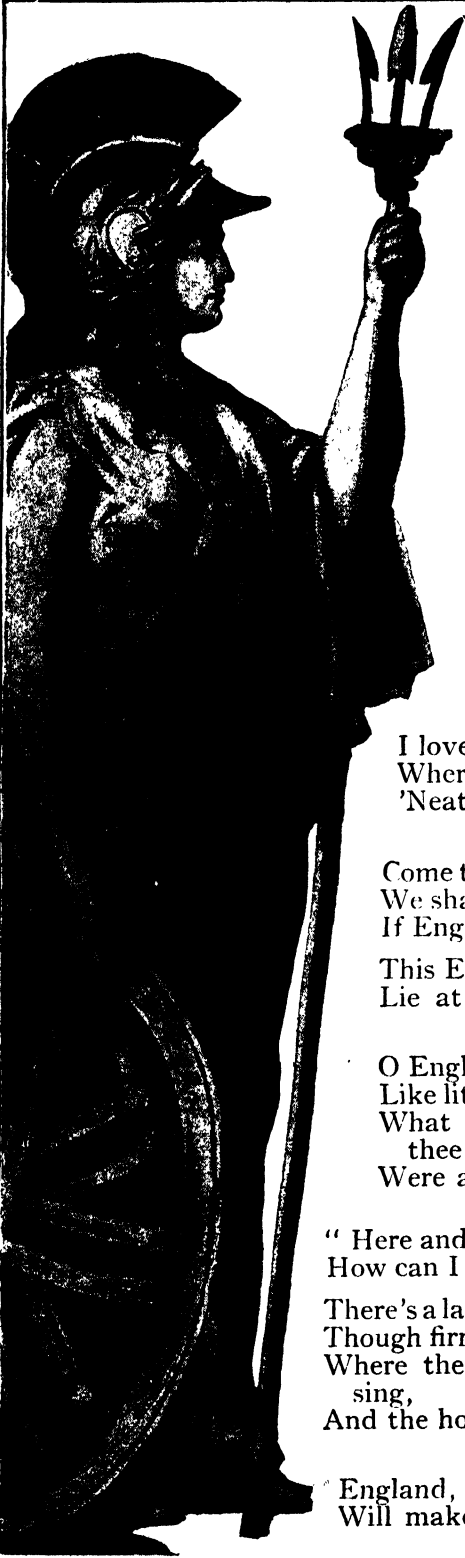


This picture, painted by Turner, shows the Eddystone Lighthouse in a gale. The first Eddystone Lighthouse was blown away in a single night, and at the Bishop Rock Lighthouse, shown on page 103 the great fog-bell, weighing more than a quarter of a ton and hanging a hundred feet above the sea, was carried away by the angry waves.

THE FOUNDATIONS NOT MADE WITH HANDS



Without lighthouses, those wonderful stars of earth that guide the mariner as he sails upon the dark waters, it would be practically impossible for the world's ships to bring their costly merchandise to our shores. Every here and there are terrible rocks, like the Bishop Rock, at the extreme west of the Scilly Islands, that invite sailors to their doom. As this picture shows, a splendid lighthouse has been built upon the pinnacle of rock. Fog-signals are exploded on the curved iron at the top, so that the shock may not affect the lighthouse itself. The Bishop's Rock is the most exposed of all the world's lighthouses, and has had to be more strongly built than any.



ENGLAND, OUR ENGLAND

We sailed wherever ship could sail,
We founded many a mighty state ;
Pray God our greatness may not fail
Through craven fears of being great.

Tennyson

What England was, shall her true sons
forget ? [yet.

. . . Some love England and her honour
And these in our Thermopylæ shall stand,
And hold against the world this honour
of the land.

Tennyson

O England, dearer far than life is dear,
If I forget thy prowess nevermore
Be thy ungrateful son allowed to hear
Thy green leaves rustle, or thy
torrents roar.

Wordsworth

Slaves cannot breathe in England ;
if their lungs

Receive our air, that moment they are free.
They touch our country and their
shackles fall.

Cowper

I love this island lone and wild,
Where England, freedom's child,
'Neath its old flag doth right maintain.

Victor Hugo

Come the three corners of the world in arms and
We shall shock them ; nought shall make us rue,
If England to itself do rest but true.

Shakespeare

This England never did, nor never shall,
Lie at the proud foot of a conqueror.

Shakespeare

O England, model to thy inward greatness,
Like little body with a mighty heart,
What might'st thou do, that honour would
thee do,
Were all thy children kind and natural !

Shakespeare

" Here and here did England help me :
How can I help England ? "—say.

Robert Browning

There's a land, a dear land, where the rights of the free,
Though firm as the earth, are as wide as the sea ;
Where the primroses bloom, and the nightingales
sing,
And the honest poor man is as good as a king.

Charles Mackay

England, France, all men to be,
Will make one people ere man's race be run.

Tennyson

OUR ISLAND HOME

THE GREEN FIELDS OF ENGLAND

GREEN fields of England ! wheresoe'er
Across this watery waste we fare,
One image at our hearts we bear,
Green fields of England everywhere.

Sweet eyes in England, I must flee
Past where the waves' last confines be,
Ere your love smile I cease to see,
Sweet eyes in England, dear to me !

Dear home in England, safe and fast,
If but in thee my lot lie cast,
The past shall seem a nothing past
To thee, dear home, if won at last ;
Dear home in England, won at last !

ARTHUR HUGH CLOUGH

NATURE HOLDS COUNSEL WITH HERSELF

NATURE held counsel with herself, and
said, " My Romans are gone. To build
my new empire I will choose a rude race,
all masculine, with brutish strength. I
will not grudge a competition of the
roughest males. Let buffalo gore buffalo,
and the pasture to the strongest ! For I
have work that requires the best will and
sinew. Sharp and temperate northern
breezes shall blow to keep that will alive
and alert. The sea shall disjoin the people
from others, and knit them to a fierce
nationality. It shall give them markets
on every side. Long time I will keep them
on their feet, by poverty, border wars, sea-
faring, sea risks, and the stimulus of gain.
An island, but not so large, the people not
so many as to glut the markets and depress
one another, but proportioned to the size
of Europe and the continents." EMERSON

BREATHES THERE THE MAN

BREATHES there the man, with soul so dead,
Who never to himself hath said,
This is my own, my native land ;
Whose heart hath n'er within him burned,
As home his footsteps he hath turned,
From wandering on a foreign strand ?

If such there breathe, go, mark him well ;
For him no minstrel raptures swell ;
High though his titles, proud his name,
Boundless his wealth as wish can claim,
Despite those titles, power, and pelf,
The wretch, concentrated all in self,
Living, shall forfeit fair renown,
And, doubly dying, shall go down
To the vile dust from whence he sprung,
Unwept, unhonoured, and unsung.

SIR WALTER SCOTT

THE MERCHANTS OF OLD ENGLAND

THE Land, it boasts its titled hosts ; they
could not vie with these,
The merchants of old England, the seigneurs
of the seas,
In the days of great Elizabeth, when they
sought the Western Main,
Maugre and spite the Cæsars' might, and
the menaces of Spain.
And the richly freighted argosy, and the
good galleon went forth
With the bales of Leeds or Lincoln, and
the broadcloths of the North ;
And many a veteran mariner would speak,
'midst glistening eyes,
Of the gain of some past voyage and the
hazards of emprise ;
Or the long night-watches the wondrous
tale was told
Of isles of fruit and spices, and fields of
waving gold.
And the young and buoyant-hearted would
oft that tale renew,
And dream their dearest dream should be,
their wildest hopes come true.
So, with brave hearts and dauntless, they
sailed for the unknown ;
For each he sought his inmost thought,
and a secret of his own.

The land, it boasts its titled hosts ; they
could not vie with these,
The merchants of Old England, the
seigneurs of the seas.

VISCOUNT STRANGFORD

ENGLAND AND AMERICA IN 1782

O THOU that sendest out the man
To rule by land and sea,
Strong mother of a lion-line,
Be proud of those strong sons of thine
Who wrenched their rights from thee !
What wonder if, in noble heat,
Those men thine arms withstood,
Retaught the lesson thou hadst taught,
And in thy spirit with thee fought,
Who sprang from English blood !
But thou rejoice with liberal joy,
Lift up thy rocky face,
And shatter, when the storms are black
In many a streaming torrent back,
The seas that shock thy base !
Whatever harmonies of law
The growing world assume,
Thy work is thine. The single note
From that deep chord which Hampden smote
Will vibrate to the doom.

TENNYSON

THE CHILDREN'S TREASURE HOUSE

MEN OF ENGLAND

MEN of England ! who inherit
 Rights that cost your sires their blood !
 Men whose undegenerate spirit
 Has been proved on land and flood :
 By the foes ye've fought uncounted,
 By the glorious deeds ye've done,
 Trophies captured—breaches mounted,
 Navies conquered—kingdoms won !
 Yet, remember, England gathers
 Hence but fruitless wreaths of fame,
 If the freedom of your fathers
 Glow not in your hearts the same.
 What are monuments of bravery,
 Where no public virtues bloom ?
 What avails in lands of slavery,
 Trophied temples, arch, and tomb ?
 Pageants ! Let the world revere us
 For our people's rights and laws,
 And the breasts of civic heroes
 Bared in Freedom's holy cause.
 Yours are Hampden's, Russell's glory,
 Sidney's matchless shade is yours—
 Martyrs in heroic story,
 Worth a hundred Agincourts !
 We're the sons of sires that baffled
 Crowned and mitred tyranny ;
 They defied the field and scaffold
 For their birthrights—so will we !

THOMAS CAMPBELL

FROM AN OLD GERMAN NEWSPAPER

It is interesting now to recall this old passage from an appreciation of England by a German editor

ENGLAND has interests to defend over the whole earth ; her ships cruise in all oceans, and the red coats of her soldiers are to be seen in every continent. She fights in all quarters of the globe, often under the greatest difficulties, and constantly with comparatively insignificant military forces, yet almost invariably holds her ground. Threatened and fully occupied on the Indian frontier, Great Britain simultaneously conducts a victorious campaign in Egypt against powerful, dangerous, and ruthless foes. This manifestation of universal power, this defence and extension of a world-wide empire, such as has not been paralleled for nearly twenty centuries, gives fresh proof of the invincible and unbroken vigour and vitality of the Anglo-Saxon race. England is still a distinguished pioneer of civilisation, and the best wishes of her people always accompany these enterprises, which are undertaken, not only to extend her power and dominion but also to promote the interests of humanity and civilisation. The British sword is always followed by the British plough and ship.

AN OLD MAN'S PRAYER

GOD of my fathers, now the day
 Draws near when I must leave the land
 Wherein I trod life's pleasant way,
 And leave my dear ones in Thy hand,
 Grant that mine eyes, so soon to close,
 May see, by Thy almighty will,
 The land I love by England's foes
 Unsullied still.

Soon must I pass to where my dead,
 Born of the soil I proudly trod,
 Wait, where no tears of grief are shed,
 To greet me round the throne of God.
 Lord, let me pass behind the veil
 From that dear land they loved so well
 Unconquered still, and with no tale
 Of shame to tell.

GEO. R. SIMS IN THE "REFEREE"

ENGLAND INVINCIBLE

ENGLAND has been destroyed every ten or fifteen years—from the time of the Armada to the present day—in the prophecies of men. Every few years she has been about to be overthrown by sea ; she has been about to be ploughed up by the land ; she has been about to be stripped of her resources in India and in other parts of the globe. Nations have formed alliances against her ; the armies and fleets of the civilised world have gone about her ; her interests have been repeatedly and violently assailed, and yet she stood, as she now stands, mistress of the seas, and the strongest power on earth. HENRY WARD BEECHER

THE CAUSE IS OURS

DAY, like our souls, is fiercely dark.
 What then ? 'Tis day !
 We sleep no more. The cock crows—hark !
 To arms ! Away !
 They come ! they come ! The knell is rung
 Of us or them ;
 Wide o'er their march the pomp is flung
 Of gold and gem.
 In vain your pomp, ye evil powers,
 Insults the land ;
 Wrongs, vengeance, and the cause are ours,
 And God's right hand !
 Madmen ! they trample into snakes
 The wormy clod !
 Like fire, beneath their feet awakes
 The sword of God !
 Behind, before, above, below,
 They rouse the brave ;
 Where'er they go they make a toe,
 Or find a grave.

EBENEZER ELLIOTT

OUR ISLAND HOME

WE MUST BE FREE OR DIE

It is not to be thought of that the flood
Of British freedom—which, to the open sea
Of the world's praise, from dark antiquity
Hath flowed, with pomp of waters, unwith-
stood,
Roused though it be full often to a mood
Which spurns the check of salutary bands—
That this most famous stream in bogs and
sands
Should perish ; and to evil and to good
Be lost for ever. In our halls is hung
Armoury of the invincible knights of old :
We must be free or die, who speak the
tongue
That Shakespeare spake ; the faith and
morals hold
Which Milton held. In everything we are
sprung
Of Earth's first blood, have titles manifold.

WORDSWORTH

THE ISLAND

DADDY NEPTUNE one day to Freedom
did say,
" If ever I lived upon dry land,
The spot I should hit on would be little
Britain ; "
Says Freedom, " Why, that's my own Island. "
Oh, what a snug little Island !
A right little, tight little Island !
Seek all the globe round, none can be found
So happy as this little Island.
Julius Cæsar the Roman, who yielded to no
man,
Came by water, he couldn't come by land !
And Dane, Pict, and Saxon, their homes
turned their backs on
And all for the sake of our Island.
Oh, what a snug little Island,
They'd all have a touch at the Island,
Some were shot dead—some of them fled,
And some stayed to live on the Island.
Then a very great war-man, called Billy the
Norman,
Cried, " Hang it ! I never liked my land ;
It would be much more handy to leave this
Normandy,
And live on your beautiful Island. "
Says he, " 'Tis a snug little Island,
Shan't we go visit the Island ? "
Hop, skip, and jump—there he was plump,
And he kicked up a dust in the Island.
Then the Spanish Armada set out to invade
her,
Quite sure if they ever came nigh land,
They couldn't do less than tuck up Queen
Bess,
And take their full swing in the Island.

Oh, the poor Queen and the Island,
The drones came to plunder the Island,
But snug in her hive the Queen was alive,
And buzz was the word in the Island.

I don't wonder much that the French and
the Dutch

Have since often been tempted to try land,
And I wonder much less they have met no
success,

For why should we give up our Island ?
We'd fight for our right to the Island,
We'd give them enough of the Island ;
Invaders should just bite at the dust,
But not a bit more of the Island.

Then long live the King, may his foes e'er
be seen

To perish before they come nigh land ;
And may Providence bless, and grant him
success

In defending the rights of our Island.

Oh, it's a free little Island,
A dear little spot is our Island,
And Britons all can and will die to a man
Ere they will give up a grain of our Island.

CHARLES DIBDIN

THE WORK OF OUR HANDS

How marvellous it all is ! Built not by
saints and angels, but the work of men's
hands ; cemented by men's honest blood
and with a world of tears ; welded by the
best brains of centuries past ; not without
the taint and reproach incidental to all
human work, but constructed on the whole
with pure and splendid purpose. Human,
and not wholly human, for the most heedless
and the most cynical must see the fingers of
the Divine. Growing as trees grow, while
others slept ; fed by the faults of others as
well as by the character of our fathers ;
reaching with the ripple of a resistless tide
over tracts and islands and continents,
until our little Britain woke up to find her-
self the foster-mother of nations and the
source of united empires. Do we not
hail in this less the energy and fortune of
a race than the supreme direction of the
Almighty ? While we see, far away in the
rich horizons, growing generations fulfilling
the promise, do we not own with resolution
mingled with awe the honourable duty
incumbent on ourselves ? Shall we, then,
falter or fail ?

LORD ROSEBERY

THE SAFE LAND

ENGLAND is the freest country in the
world. If a man in England had as many
enemies as hairs on his head, no harm would
happen to him.

MONTESQUIEU

THE CHILDREN'S TREASURE HOUSE

LAND OF OUR BIRTH

LAND of our birth, we pledge to thee
Our love and toil in years to be ;
When we are grown and take our place
As men and women with our race.

Father in heav'n, who lovest all,
Oh, help Thy children when they call ;
That they may build, from age to age,
An undefiled heritage.

Teach us to bear the yoke in youth,
With steadfastness and careful truth ;
That, in our time, Thy grace may give
The truth whereby the nations live.

Teach us to rule ourselves always,
Controlled and cleanly night and day ;
That we may bring, if need arise,
No maimed or worthless sacrifice.

Teach us to look, in all our ends,
On Thee for judge, and not our friends ;
That we, with Thee, may walk uncowed
By fear or favour of the crowd.

Teach us the strength that cannot seek,
By deed or thought, to hurt the weak ;
That, under Thee, we may possess
Man's strength to comfort man's distress.

Teach us delight in simple things,
And mirth that has no bitter springs ;
Forgiveness free of evil done,
And love to all men 'neath the sun !

Land of our birth, our faith, our pride,
For whose dear sake our fathers died ;
O motherland, we pledge to thee,
Head, heart, and hand through the years
to be.

RUDYARD KIPLING

THE LESSON OF THE WAR

THE feast is spread through England
For rich and poor today ;

Greetings and laughter may be there,
But thoughts are far away ;

Over the stormy ocean,
Over the dreary track,
Where some are gone whom England
Will never welcome back.

Breathless she waits, and listens
For every eastern breeze

That bears upon its bloody wings
News from beyond the seas.

The leafless branches stirring
Make many a watcher start,
The distant tramp of steeds may send
A throb from heart to heart.

The rulers of the nation,
The poor ones at their gate,
With the same eager wonder
The same great news await.

The poor man's stay and comfort,
The rich man's joy and pride,
Upon the bleak Crimean shore
Are fighting side by side.

The bullet comes—and either
A desolate hearth may see ;
And God alone tonight knows where
The vacant place may be !
The dread that stirs the peasant
Thrills nobles' hearts with fear,
Yet above selfish sorrow
Both hold their country dear.

The rich man who reposes
In his ancestral shade,
The peasant at his ploughshare,
The worker at his trade,
Each one his all has perilled,
Each has the same great stake,
Each soul can but have patience,
Each heart can only break !

Hushed is all party clamour ;
One thought in every heart,
One dread in every household,
Has bid such strife depart.
England has called her children ;
Long silent, the word came
That lit the smouldering ashes
Through all the land to flame.

O you who toil and suffer,
You gladly heard the call ;
But those you sometimes envy
Have they not given their all ?
O you who rule the nation,
Take now the toil-worn hand,
Brothers you are in sorrow,
In duty to your land.

Learn but this noble lesson,
Ere Peace returns again,
And the life-blood of Old England
Will not be shed in vain.

ADELAIDE ANNE PROCTER

THIS THRONE OF KINGS

THIS royal throne of kings, this sceptred
isle,

This earth of majesty, this seat of Mars,
This other Eden, demi-paradise,
This fortress built by Nature for herself
Against infection and the hand of war,
This happy breed of men, this little world,
This precious stone set in the silver sea,
Which serves it in the office of a wall
Or as a moat defensive to a house,
Against the envy of less happier lands,
This blessed spot, this earth, this realm,
this England, [dear land,
This land of such dear souls, this dear,
Dear for her reputation through the world.

SHAKESPEARE

OUR ISLAND HOME

A STATE

WHAT constitutes a state ?
Not high-raised battlement or
laboured mound,
Thick wall or moated gate ;
Not cities proud, with spires and turrets
crowned,
Not bays and broad-armed ports,
Where, laughing at the storm, rich navies
ride ;
Not starred and spangled courts,
Where low-bred baseness wafts perfume to
pride.

No ; men, high-minded men,
With powers as far above dull brutes
endued,
In forest, brake, or den,
As beasts excel cold rocks and brambles
rude :
Men who their duties know,
But know their rights ; and, knowing, dare
maintain,
Prevent the long-aimed blow,
And crush the tyrant while they rend the
chain.

These constitute a state,
And sovereign Law, at the state's collected
will,
O'er thrones and globes elate
Sits empress, crowning good, repressing ill ;
Smit by her sacred frown,
The fiend Discretion like a vapour sinks,
And e'en the all-dazzling crown
Hides his faint rays and at her bidding
shrinks.

Such was this Heaven-loved isle,
Than Lesbos fairer, and the Cretan shore !
No more shall Freedom smile ?
Shall Britons languish, and be men no
more ?

SIR WILLIAM JONES

SO LONG AS ENGLAND RIDES THE SEA

THOSE who desire to see the principle of
liberty thrive and extend throughout the
world should cherish, with an almost religious
veneration, the prosperity and greatness of
England. So long as England shall ride
pre-eminent on the ocean of human affairs,
there can be none whose fortunes shall be so
shipwrecked, there can be none whose con-
dition shall be so desperate and forlorn,
that they may not cast a look of hope
towards the light that beams from hence ;
and though they may be beyond the reach of
our power, our moral support and sympathy
shall cheer them in their adversity, and
assist them to bear up and to hold out,
waiting for a better day. LORD PALMERSTON

THE FREE MEN

AN Englishman hears that the Queen
Dowager wishes to establish some claim
to put her park paling a rod forward into his
grounds, so as to get a coachway and save
her a mile to the avenue. Instantly he
transforms his paling into stonemasonry,
solid as the walls of Cuma, and all Europe
cannot prevail on him to sell an inch of the
land. They delight in a freak as the proof
of their sovereign freedom. EMERSON

RULE, BRITANNIA !

WHEN Britain first, at Heaven's command,
Arose from out the azure main,
This was the charter of the land,
And guardian angels sang this strain—
Rule, Britannia ! Britannia rule the
waves !
Britons never shall be slaves.
The nations not so blessed as thee
Must in their turns to tyrants fall,
While thou shalt flourish great and free,
The dread and envy of them all.
Rule, Britannia ! Britannia rule the
waves !

Britons never shall be slaves.
Still more majestic thou shalt rise,
More dreadful from each foreign stroke,
As the loud blast that tears the skies
Serves but to root thy native oak.
Rule, Britannia ! Britannia rule the
waves !

Britons never shall be slaves.
Thee haughty tyrants ne'er shall tame ;
All their attempts to bend thee down
Will but arouse thy generous flame
To work their woe and thy renown.
Rule, Britannia ! Britannia rule the
waves !

Britons never shall be slaves.
The Muses still with freedom found
Shall to thy happy coast repair—
Blest Isle, with matchless beauty crowned,
And manly hearts to guard the fair.
Rule, Britannia ! Britannia rule the
waves !

Britons never shall be slaves.
JAMES THOMSON

THE MAN WHO WOULD BE KING

AN Englishman would live twenty years
in a house without knowing his neigh-
bours, a Frenchman would know them all in
twenty-four hours. Let the sociable French-
man be planted among the tattooed islanders
of the South Seas and in two years he
would be found tattooed ; put an English-
man in the same position and he would be
king of the island in the time. KOSSUTH

**WOULD
YOU SEE
ENGLAND ?**

No man at any time,
Not from the dawn of her prime
Up to this hour where we stand,
Proud of our land,
Proud, proud of our motherland,
Has seen great England's face,
Has ever truly said, " Now, by God's grace,
I look upon my England and behold
How wondrous beautiful she is, and strong,
and bold."

She is invisible. This gracious isle
Is but the garment that she wears awhile,
And those far Englands scattered through
the seas

But thoughts of hers she sows upon the breeze,
Herself unseen.

She is a Soul celestial and serene,
Immortal Spirit born of God ;
She wears no crown, she wields no rod,
Nor seeks an empire, nor desires the pride
Of warlike legions harnessed at her side ;
But in the thronging cities, and the roar
Of engines throbbing on from shore to shore,
And in the glory of our pomp and show,
And in the shadow of our want and woe,
And by the muddied rivers, and the dumb
Anguish of alley, rookery, and slum,
And in the poet's heart, the statesman's brain,
And in the hope of Science, and each gain
By labour won in constant strife
With hostile Nature and opposing life,
Lifts evermore her hands in prayer,
Sees through the stars a shining stair,
Where souls descending and ascending raise
To God alone their hymns of praise,
And longs in all her toils of death and birth
For heaven itself to come to earth.



Would you see England ?—then, be wise,
Kneel down. and bow your head and
close your eyes.

**BY
HAROLD
BECBIE**

PICTURE MAPS OF THE BRITISH ISLES

These maps are not exact in distance, and so on, but they show the country as in a picture, so that we can find our way about more easily than in an ordinary map, where the markings are not at all like reality.



THE EASTERN COUNTIES OF ENGLAND AS THEY MUST APPEAR TO AN AIRMAN OVER LONDON

PICTURE MAPS OF THE BRITISH ISLES THAT



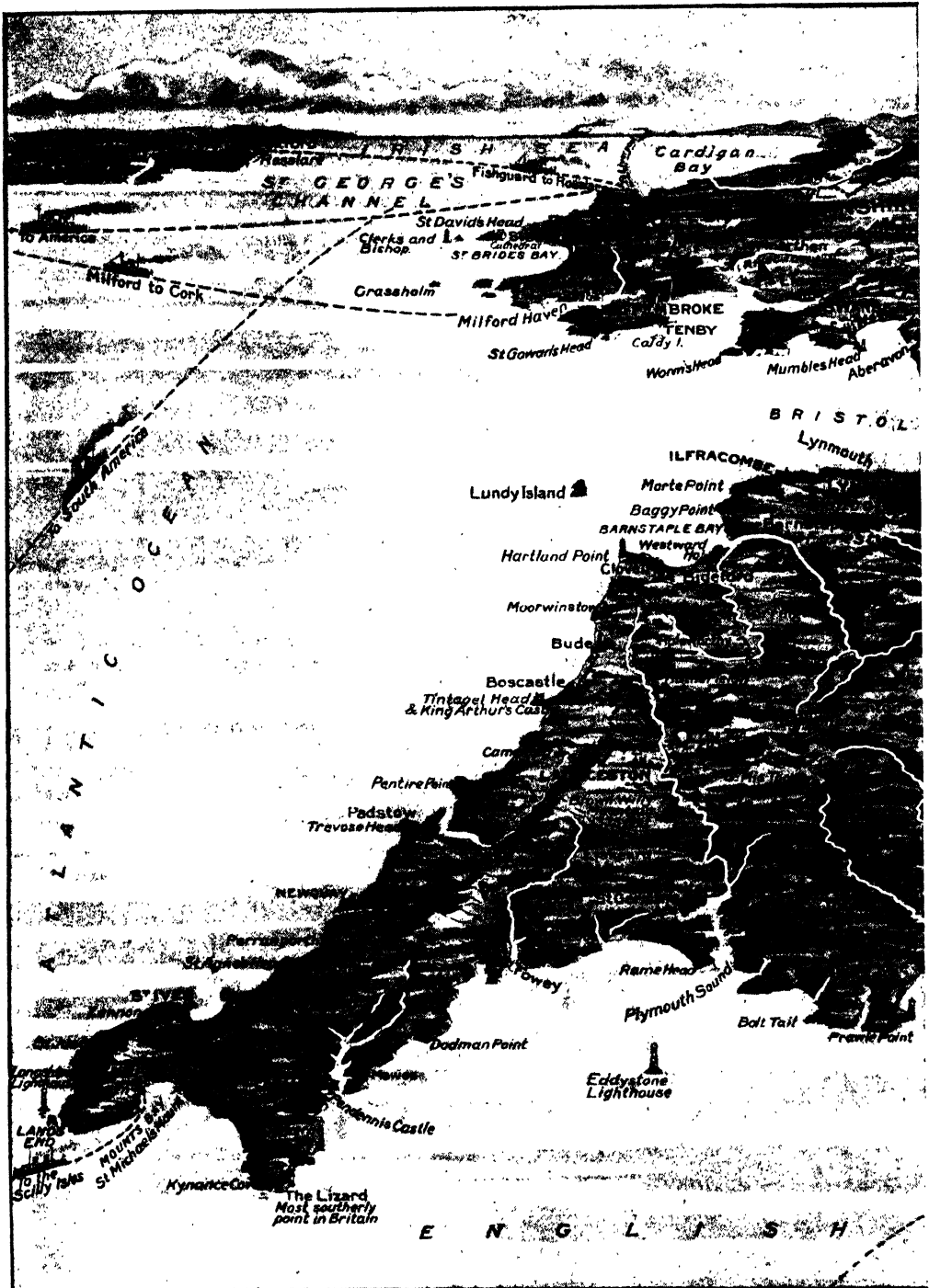
THE SOUTH-EASTERN COUNTIES OF ENGLAND AND THE COUNTIES THAT LIE ROUND
 It is often puzzling to find our way about a map, in which we see the world not at a as it appears to our eyes. That is, of course, because it is very important that maps should show distances accurately, and the exact situations of rivers and mountains and valleys and in a small space this can be done only in lines and markings not at all like reality. Thus we say a dot is a town, a few strokes are a mountain, and so on; and so to many people

SHOW THE COUNTRY ROUND YOUR HOME



ABOUT HER GREAT CAPITAL, LONDON, THE GREATEST CITY THE WORLD HAS EVER SEEN map is like a foreign language, difficult to understand. These maps show the country as in a picture, so that we may find the place in which we live, and find our way from town to town as if we were walking. We see quite clearly here how our home lies in relation to the places round about us, and all we have to remember is that the aim of these picture maps is to give us an impression of the country rather than exactness of distance and size.

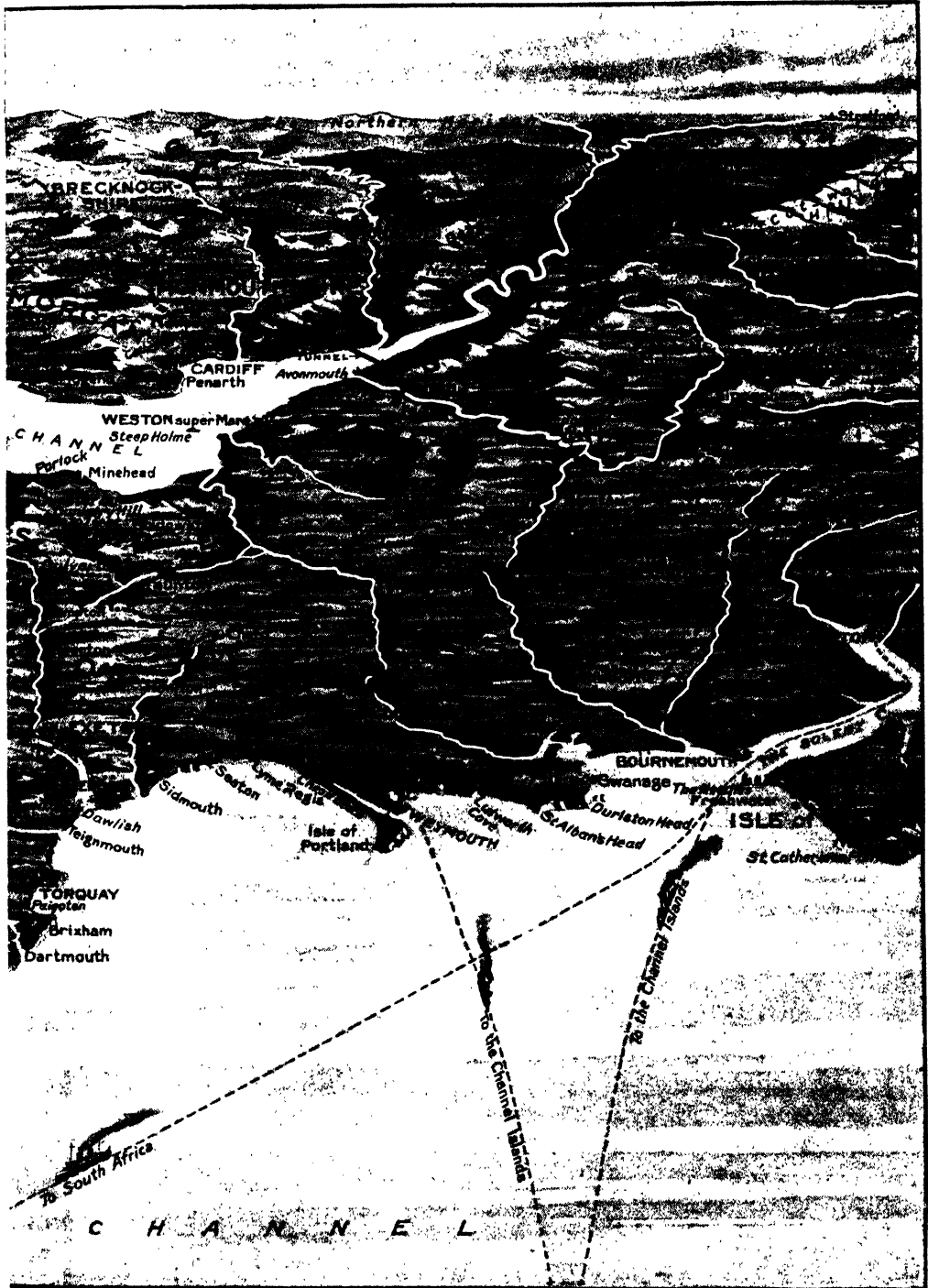
THE SOUTH-WESTERN COUNTIES OF ENGLAND



CORNWALL, THE MOST WESTERLY COUNTY IN ENGLAND, JUTTING OUT ITS ROCKY HEADLANDS TO MEET THE STORMS THAT SWEEP IN FROM THE WILD ATLANTIC OCEAN

The counties in the south-west of England are among the most fertile and beautiful in the British Islands. This is largely due to the influence of the warm waters of the Gulf Stream which approach their shores, and to the warm south-westerly winds, which bring abundant

AND THE SOUTHERN SHORES OF WALES



THE WEST COUNTRY OF THE MOTHERLAND. THE HOME OF THE GALLANT SEAMEN AND THE BRAVE EXPLORERS WHO HAVE SPREAD THE BRITISH EMPIRE AROUND THE WORLD

rain to the fields and orchards of this picturesque corner of England. The long coast-line, the numerous harbours, and the easy access to the sea have made these counties famous for their brave and daring seamen, Drake, Raleigh, and Sir Humphrey Gilbert being men of Devon.

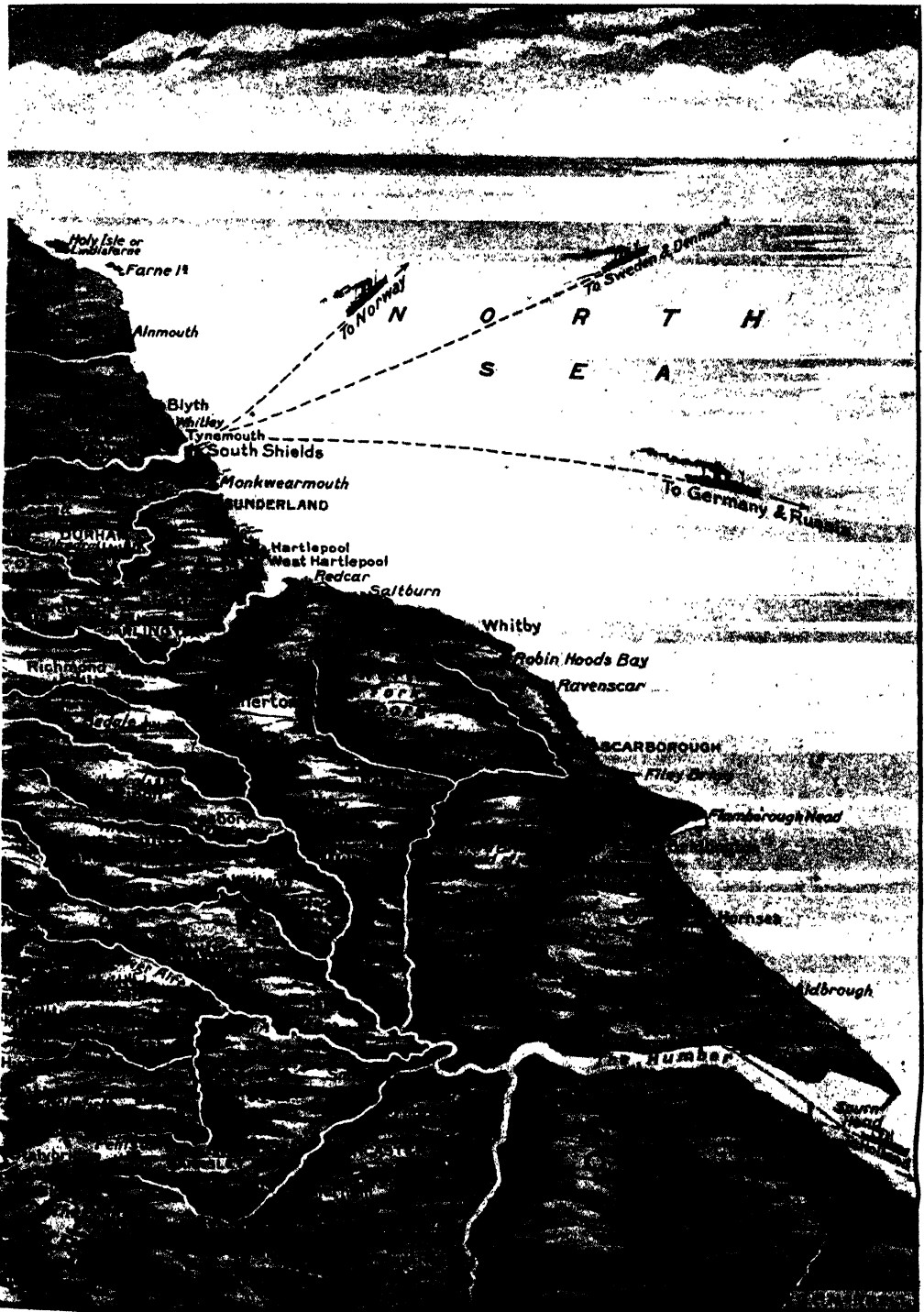
THE MOST PRECIOUS LAND IN THE WORLD



LANCASHIRE AND YORKSHIRE, NORTHUMBERLAND AND DURHAM. THE CENTRES OF THE

Divided from each other by the Pennine mountains lie Lancashire and Yorkshire, the two greatest industrial centres of England. Lancashire owes its eminence largely to the moist

A PICTURE MAP OF NORTHERN ENGLAND



INDUSTRIES THAT HAVE MADE ENGLAND GREAT—COTTON AND WOOL, IRON AND COAL

climate, which has enabled it to establish the greatest cotton industry in the world : Yorkshire owes its position largely to the vast pasturages for sheep, which gave rise to its woollen industry.

WALES AND THE SHORES OF THE IRISH SEA



WALES, THE MOUNTAINOUS HOME OF AN ANCIENT RACE

To the hills of Wales fled the early inhabitants of our land before the advancing Roman, Saxon, and Dane, and here, in this ancient home of a Celtic race, are still those who speak their ancient tongue. The country is mostly agricultural, but the coal and iron fields of the counties bordering the Bristol Channel have made them important centres of industry.

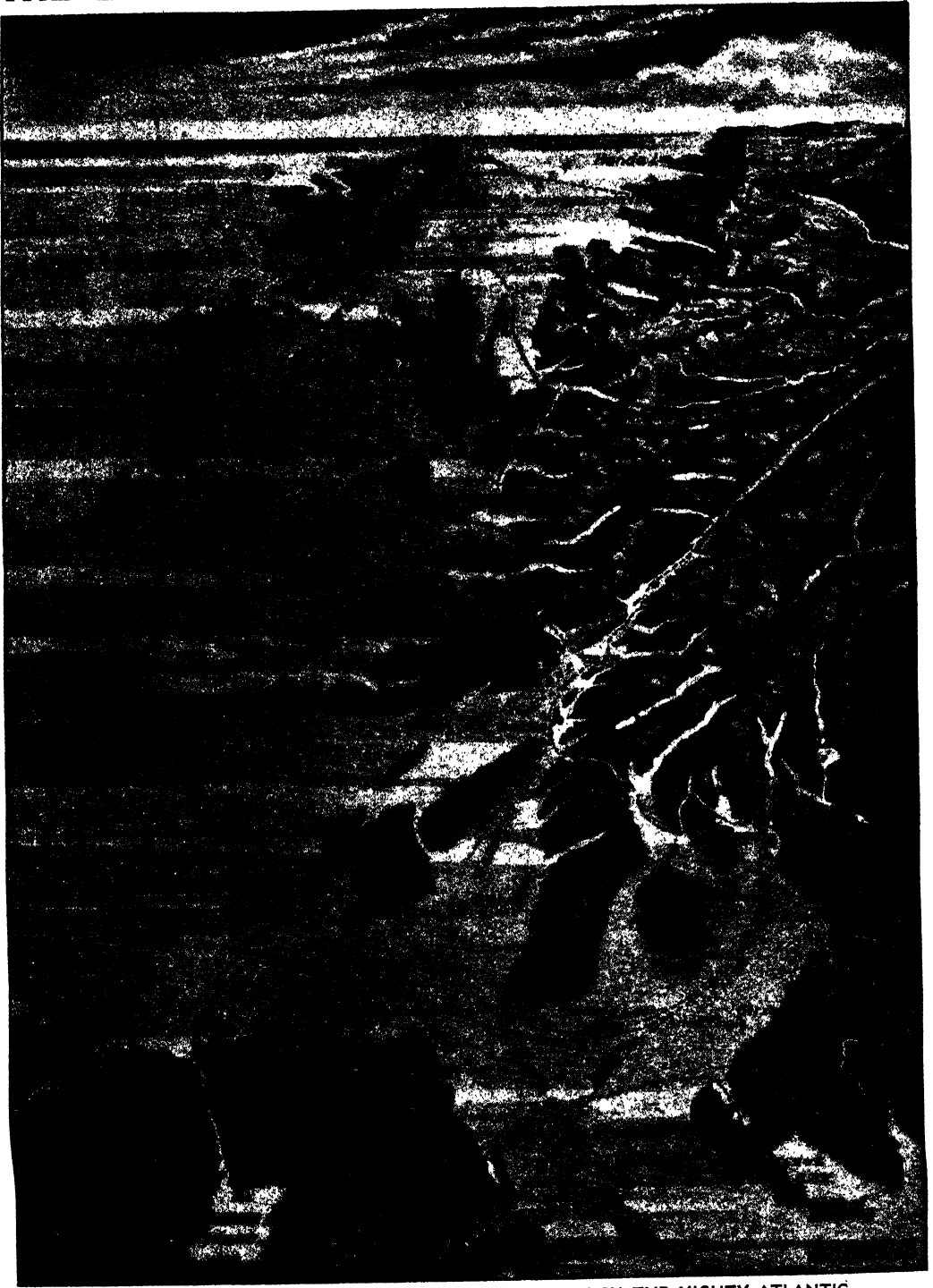
THE MIDLAND COUNTIES OF ENGLAND



A MAP OF CENTRAL ENGLAND, SHOWING THE BASINS OF HER LARGEST RIVERS

Through the heart of England to the sea flow the Trent and the Avon, the Thames and the Severn. When our great industries arose in the days before George Stephenson, the easy river access to the sea enabled England to become the foremost trading country in Europe. This map shows Birmingham and other hives of industry in the centre of the land.

THE BRITISH ISLANDS OUT IN THE ATLANTIC



THE RUGGED WESTERN SHORES OF SCOTLAND, SWEEPED BY THE MIGHTY ATLANTIC

This picture map gives a graphic idea of the way in which the powerful forces of Nature shape and mould our homelands. The Atlantic waves have broken island upon island away from their parent, Scotland, have divided her from Ireland, and bitten deep into her mountainous western coast.

& THE HIGHLANDS & LOWLANDS OF SCOTLAND



AN AIRMAN'S VIEW OF EASTERN SCOTLAND AND THE ORKNEY AND SHETLAND ISLANDS

The eastern coast-line of Scotland stands out in smooth and peaceful contrast to its western coast. Sheltering on the River Clyde, on the west stands Glasgow, but all the rest of Scotland's important seaport towns—Aberdeen, Dundee, Leith, and Edinburgh—lie on the calmer seaboard on the east.

THE WESTERN COUNTIES OF IRELAND



THE WILD WESTERN CAPES THAT LOOK OUT ACROSS THE ATLANTIC

Receiving rather more than their fair share of the westerly rains brought into our islands from the Atlantic, and lacking minerals and safe harbours, the west of Ireland is rather a distressful country. On the western coast cable and wireless stations rival each other in speaking to that great republic of the West where so many of Ireland's children have sought and found a home.

THE EASTERN COUNTIES OF IRELAND

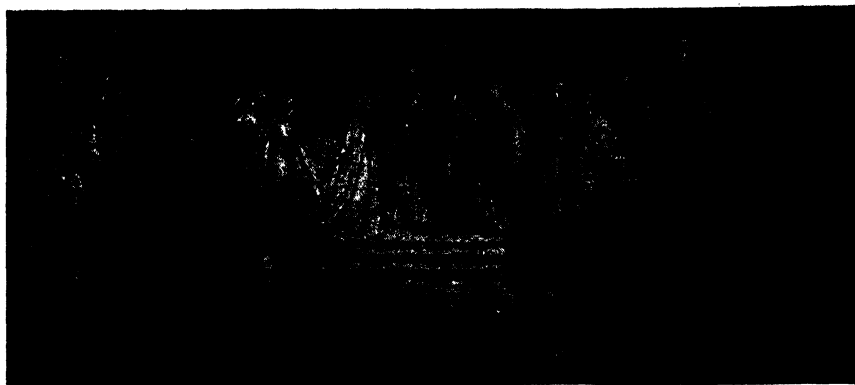


THE EASTERN SEABOARD OF IRELAND AND THE NORTHERN SEAT OF ITS INDUSTRIAL PROSPERITY
 Peopled by enterprising Scotsmen, the north-eastern counties of Ireland have established important industries, such as linen-making and shipbuilding, which have become a source of strength to the whole island. Dublin, less prosperous than Belfast, is the seat of government, and has some importance as a seaport. The steamship routes from Ireland to Great Britain are shown on this map.

THE KING WHO MADE ENGLAND A NATION



ALFRED THE GREAT RECEIVING THE SURRENDER OF THE DEFEATED DANISH CHIEF, GUTHRUM
From the picture by Mr. Herbert A. Bone



The marriage of William the Conqueror to Matilda of Flanders, in Normandy

A THOUSAND YEARS OF KINGS

THE UNBROKEN LINE OF ENGLAND'S RULERS

GOD save the King! This is the cry at the accession of every British King, and we can say in this country what can be said nowhere else, that our King's ancestors have ruled the land with hardly a break for more than a thousand years. These pages do not give a history of England, but a pageant of her kings, a picture of each, except a few of the very early ones, beginning with one of the wisest and noblest of King George's ancestors.

Who was the first King of England? We had best reckon that Alfred the Great was, because, until his time, there was always more than one king in England, and it was Alfred who made our country into one kingdom, for which great act of kingship men love and honour his memory, though he has been dead for a thousand years. He stands out as one of the great heroic figures of all times—our national hero, who found England rent and torn, and falling to pieces, and welded its peoples into one nation, the freest in the world, fighting, not for his own welfare and glory, but for the welfare of his countrymen and the glory of God.

Perhaps there has never been another man of whom it can be said that he was the bravest, and the wisest, and the best of all who lived in his day. He feared no danger; if things went ill, he never gave in;

when things went well, he only strove to make them go still better. He taught men to love peace and order and justice and mercy, but he taught them also how to fight.

Great men nearly always make enemies who think that their famous deeds were done from self-seeking, or were not great deeds at all; but never a word of dispraise has anyone been found to speak against Alfred the Great, founder of England's greatness.

Kings wise and strong reigned after Alfred, but in time came the evil days of Ethelred the Unready, when woe came upon England, and Sweyn, King of Denmark, conquered the land, driving out Ethelred for the traitorous deeds he had done; but Sweyn, dying, gave England another great king—his own son, Canute.

Canute was really a sort of emperor, for in those days the Danes had a great kingdom, and he was king of the Danes as well as of the English. He, too, was a wise man and a valiant warrior. The thing that he did for England was to make the Danish folk and the English folk in England into one people, but after him the English kingdom and the Danish kingdom were severed again.

For Edward the Confessor, a descendant of Alfred the Great, came from Normandy to be made

King of England. A very pious man was King Edward, guileless, but having no skill to govern, and loving the ways of the monks and the foreign customs amid which he had been brought up. When he died, the English chose for their king Harold, the son of Godwin, a shrewd soldier and brave; but, because they had forgotten to stand together, all Englishmen shoulder to shoulder, William the Norman was able to conquer brave Harold at the battle of Hastings, and a Norman duke became King of England.

A mighty man was the Norman duke William, who made himself King of England and began the Norman line. Men said he could bend a stiffer bow and wield a heavier mace than any man of his time, and few were the knights who could meet him in the shock of fight.

Little enough did William care for right or justice in aught but what concerned his own will; what he would have, he would take at any cost, and woe to him who stood between the great duke and his desire. All men had fear of him, though he had fear of none.

THE MIGHTY DUKE WILLIAM

But his desires were not petty or wanton; they were for the most part the large ambitions of a conqueror. He made all England feel the stamp of his own iron heel, and hatred enough he got because he counted the lives of Englishmen cheaper than the lives of his hounds and the tall deer—for these, says the chronicler, “he loved as he had been their father.”

William the Conqueror covered the land with Norman barons, to whom he gave castles and lordships, and they oppressed the English folk not a little. He made all men who held land do homage to him as overlord of all. He made a survey of all the land, which was recorded in Domesday Book, and he set over the Church rulers whose discipline was sterner than that of the old Saxon prelates. He made harsh laws, too, so that his barons had much more power over the English folk than ever the old Saxon earls or thanes had had. Yet he did not do away with the old laws; and thereby, as time passed, the people got back their old Saxon freedom.

The fierce old king met his death warring in Normandy. His second son, William, called Rufus, the Red King, seized the throne. Whatsoever there was

of evil in the Conqueror was tenfold in Red William, but all that was grand in the father was lacking utterly in the son. Yet he was so strong in arms that he, too, might have been a conqueror if he had ruled himself, and not suffered evil passions and foul desires to keep him from carrying out large schemes like his father. He held all holiness in scorn, and knew neither mercy nor justice, nor heeded his pledged word. So never a soul had grief for him when a comrade's arrow pierced his heart as he was hunting, seeing that in all his days the land was a prey to the spoiler and oppressor.

THE BLOOD OF KING ALFRED

But when he fell dead in the New Forest, his younger brother, Henry I., got himself chosen king, Robert being not yet home from the Crusades. Henry was selfish enough, and, like his father, paid little heed to justice if it stood in the way of his will. But he was not a lover of war like William, though skilled enough. For his care for the arts of peace, men called him Beauclerc the Scholar, and he had wit to see that the king is strong who rules his people with a hand that is just as well as firm. And because he made this his great aim, so that the common folk might love him because he shielded them from oppression, he so wrought to send among their righteous judges, and to restore the old customs of judgment, that another name given to him was the Lion of Justice. Also, he pleased the English by taking a wife from the old royal house, so that in the veins of his children, and of every king or queen of England after him, ran the blood of Alfred, which runs to this day.

THE MIGHTY CHANGE WITH HENRY II.

When Henry died, there was warring between his daughter Matilda, once German empress and now wife of the Count of Anjou, and his nephew, Stephen of Blois, as to which should rule. As for Stephen, who got the upper hand, there is little to say but that he, too, was a stout soldier, though with no skill to rule men; so that in his time there was little but fighting and bloodshed from end to end of the land, and every petty baron did that which was right in his own eyes, and foul wrong in the eyes of all others.

When Stephen died, Henry II., the son of the Empress Matilda, became king, and there was a mighty change. He was, indeed, not much more than a boy when he began to reign; but already he knew

much of the ways of men, and had learnt how shrewd warriors manage the art of war, being himself very shrewd. So he became a king who may fairly be called great, as he restored the foundations of good government, which the evil days of Stephen had gone nigh to destroy.

We can picture him with his sturdy figure and red hair and quick, fiery eyes, a man of furious energy, swift in judgment, swift in movement, never resting, never tiring, fearfully quick to wrath, and losing all self-control in moments of passion, yet not cruel nor unforgiving—at least, to a foe who sought forgiveness and reconciliation.

THE MASTERFUL MAN WHOSE HEART WAS BROKEN

Not a very pleasing picture; but this was the very man to set right what had gone most wrong. The barons soon learned that they had met their master, and a master well worth serving loyally into the bargain. Henry knew that a just king is a strong king, and he dealt justice with an even and firm hand.

This was the king who quarrelled so bitterly with the bold archbishop, Thomas à Becket, and cried out in his passion, "Is there none who will rid me of this pestilent priest?" Whereupon certain knights, who hated the archbishop, made haste to Canterbury before the king should know how they were taking him at his word, and they slew Becket foully in the house of God, and made of Henry for evermore a sorrowful man.

But even so he did not learn to rule his temper, and therein his sons were like him, so that they became rebels against him in his old age, and joined with his enemies in France. Yet it may be that he would have smitten them all, but that his heart was broken when he learned that even the youngest son, John, whom he loved, had joined with his brothers. Lonely and desolate, the old man died.

RICHARD WITH THE LION'S HEART

Henry was the first of the Plantagenet kings, who ruled in England for over 300 years. After Henry II., reigned his second son, Richard I., whom men called the Lion-hearted, because he was the boldest knight in all Christendom, and the strongest. Richard had a great skill in the craft of war, and spent most of his time either fighting or quarrelling abroad, so that England got little good of him for all his lion's heart. But of all the kings that ever reigned

in our land, the worst and the wickedest was Richard's brother John, who was king after him. He had wit enough to be a great general, but would never set himself to any purpose for long together, and so was always defeated. He cared for nothing but his own pleasures and the quickest and easiest way of getting what he wanted by any means, however foul. But he was so very evil that he drove almost the whole people to unite against him, and they forced him to set his seal to the Great Charter, which laid it down for ever in England that no king has the right to override the law of the land.

King John died in the midst of a civil war whereof his misdeeds were the cause; and John's son Henry, who was but a boy of nine, was proclaimed king. It was only from this time that it became the law that the king's eldest son should succeed him without question.

King Henry III. had a very long reign—the longest in our history, save George III. and Queen Victoria. And a very troubled reign it was; for the poor man was in no wise fit to be a king.

THE COMING TOGETHER OF THE NATION

He was not, like his father, full of all evil; but he was the kind of man who always manages to do exactly the wrong thing, and he suffered himself to be guided, not by wise men of England, but by the Pope. It was only when his son Edward grew to man's estate that the king, growing old, suffered the prince's wisdom to overrule his own folly.

And yet England got some good out of his reign, for through it all England was growing more united, and the barons were growing more English. So, when Edward came to the throne, he was the first truly English king since the Norman Conquest, 200 years before, and it was the right ordering of England that he most sought after. King Edward, seeing that if England and Scotland and Wales were all one nation England's power would be much greater, persuaded himself that it would be right and just to make them all one nation, and Edward conquered Wales, but he never conquered Scotland.

Edward desired chiefly that all things should be done lawfully and in order, and was zealous that the laws should be so clear that none might evade them; so that for what he wrought in shaping the law, he has been called the greatest of the Plantagenets. And he learnt a great lesson from his father's vanquished foe,

Simon de Montfort, and gave a form to the council of the nation—coming to be called the Parliament—that was but little changed for 500 years and more.

The great King Edward was on his way to smite the Scots, who had found a new and daring leader, when death laid him low. But his son, Edward II., was a prince of a very different sort. He cared nothing either for fame in war or for the welfare of his people, seeking chiefly to amuse himself and give pleasure to worthless favourites. Therefore, England fell upon evil days. The Scots drove the English out from one stronghold after another, while the English king spent his time quarrelling with his barons.

THE KING WHO LOVED PLEASURE

Then, at last, the time came when for very shame Edward had to lead a mighty army into Scotland, hoping to win back what had been lost; but the Scots king knew well that he had no great general to fight against; and the English army was put to utter rout at Bannockburn. Yet Edward II. went on in his foolish ways, obstinate and pleasure-loving and heedless, until at last a plot was made against him by his wicked wife. He was dethroned and cruelly done to death, being succeeded by his son, the third Edward, who lived for fifty years after his father's death, so that his reign was the longest save three in all English history. It is famous for the king's own exploits in battle: for the greater part of his reign was taken up with a war against the French king for the French crown, which Edward claimed. But, though Edward and the Black Prince won great fame by their deeds in war, by the vanquishing of great armies with far smaller forces, so that they won back what John had lost in France a hundred and fifty years before, Edward was no great ruler like his grandfather; having no great heed to his people's welfare, but rather to his own honour and glory.

THE BOY KING AND THE PEASANTS

In the latter years of his reign, when he himself became worn out long before he was really old, the glory departed from him, and his French subjects rose up against him, so that when he died England held in France even less land than when he came to the throne.

The crown of King Edward passed to his grandson, Richard II., who was but a boy. Now, very soon after there was a rising of the peasantry, because they

wished to be set free from the services which they had to pay to their feudal lords, and to have the right to serve whom they would for wages, and to pay money for the lands they occupied and tilled instead of doing service to the owners. Then young Richard showed himself to be a lad of courage, for when the peasants clamoured in arms against him, he rode alone into their midst fearlessly, though they might very well have slain him there and then.

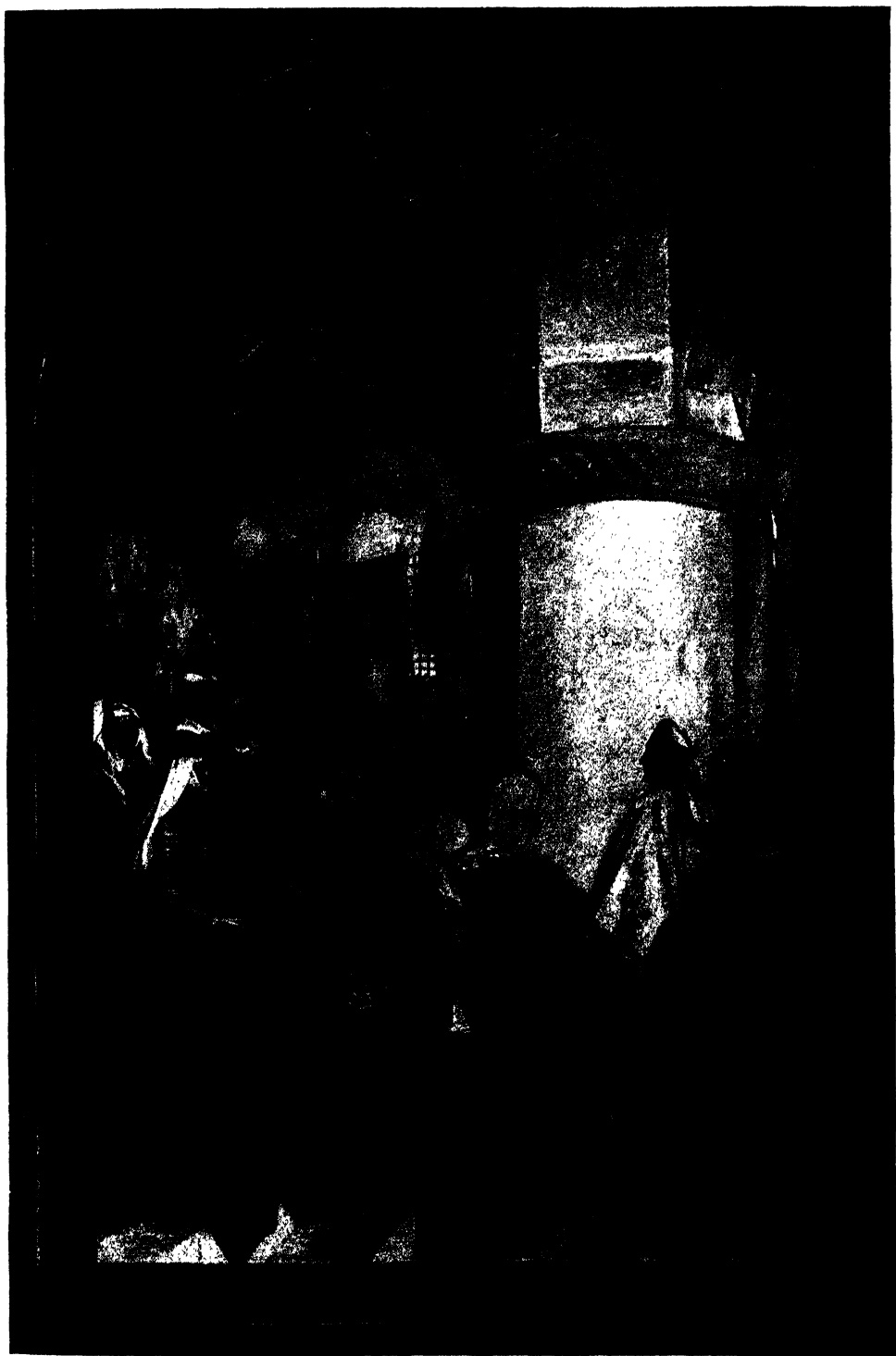
But when he was grown up he set his heart on making himself the sole ruler of the country and the barons. He exiled the greatest of the barons and seized their lands, and would have ruled despotically, perhaps; but he made so many enemies by his reckless counsels and his ill-faith that his cousin, Henry of Lancaster, returning from exile, was able to seize the crown.

This Henry IV., the first king of the House of Lancaster, was a usurper, as he had no true right to the throne even if King Richard had forfeited it by his ill-government. He sought the favour of the people, but his reign was troubled and he died broken with disease.

THE HERO KING OF AGINCOURT

Of all English kings, one of the most famous is his son, Henry V., who was a very great warrior. The realm of France in those days was torn with dissensions. Henry knew that he was King of England only because his father was a usurper, so he hesitated the less to declare that, being King of England and heir of Edward III., he had a right to the crown of France. Stories tell how he had been a terrible scapegrace as Prince of Wales, but he had also learnt not a little of the arts of war and government. He made war upon France, though with little enough justice on his side, yet perhaps with the real belief that he had been appointed to destroy the evil rule that was there, and to set up his own rule in its place. In the first year of the war he won at Agincourt a victory as famous and as wonderful as that of Edward III. at Cressy, and by his valour he won the devotion of his soldiers and of the whole English people, so that he has always ranked as one of the national heroes. Shakespeare has given a picture of the warrior king which Englishmen like to believe to be the true one. In the few years that Henry lived he made conquest of half of the realm of France.

THE CONQUEROR'S GIFT TO LONDON



WILLIAM THE CONQUEROR GRANTING A CHARTER TO THE CITY OF LONDON
From the Painting in the Royal Exchange by Seymour Lucas, R.A.

But when he died his heir, Henry VI., was only a babe, who grew up to be like a harmless, well-meaning shadow, flitting about and doing nothing but building colleges while different factions fought for the control of the government. But his cousin, Richard of York, at last laid claim to the throne, which really was his by right of descent, though it was difficult now to say that a dynasty which had reigned for three generations ought to be turned out.

THE WARS THAT BEGAN IN A GARDEN

Out of this claim came what were called the Wars of the Roses—because they began with the plucking of roses as badges in the Temple Gardens in London—and in the wars the nobles took sides very much as suited their own interest. Richard was killed, but his son won a great victory and proclaimed himself king as Edward IV.

Henry was made a prisoner after a time, but it was a long while before Edward sat securely on his throne. He was a wonderfully brilliant soldier, who never lost a battle; but he was so indolent and careless that at one time his enemies all but caught him unarmed, and he had to flee from the country for his life. But, being roused to action, when he did exert himself he again struck down his enemies, and then he had no qualms about putting to death not only poor King Henry, but his own brother. He was one of the most talented and, at the same time, one of the most selfish of all English kings; and, having secured his throne, he cared for little else than enjoying himself. He was too shrewd, however, to govern tyrannically.

THE MAN WHO RULED BY FEAR

He left his throne to his young son, Edward V.; but his own brother, Richard III., usurped the crown and murdered the young king and his brother in the Tower of London. Richard was no less able than Edward, but, having secured the crown by a foul crime, he felt that he could only keep it by the terror he inspired. Trusting no man, he was trusted by none. His friend to-day might be his foe to-morrow; the man he honoured to-day he might send to the block to-morrow. In the grip of his fierce tyranny, men turned their faces to young Henry of Richmond, of the House of Lancaster, to rid the country of the usurper. Richmond came from his exile in Brittany, and Richard fell fighting furiously on

Bosworth Field. Henry Tudor of Richmond was acclaimed king on the field where he had won his victory.

The person who had the best right to the throne was Elizabeth, daughter of Edward IV., and as soon as Henry had got himself acknowledged king by Parliament, he married her so as to secure the support of a great many of the adherents of the House of York.

Henry did not in the least mind descending to mean tricks to gain his ends, and he succeeded in making himself very wealthy. He was crafty, and when he matched his wits against those of the other crafty kings of the time he generally got the best of the contest. He was not a pleasant person, but he had the welfare of the country at heart, and gave back to it the peace and order which had been so terribly disturbed.

When his son, Henry VIII., succeeded him, the young monarch found himself secure on his throne and with plenty of money in his treasury. He was an accomplished prince, well-read, skilled in music, and a great athlete; free-handed and generous in his ways.

A STRONG BAD MAN

But behind all this show he was detestably selfish, though part of his selfishness took the shape of ambition, the desire to have the reputation of a great king and the lord of a great nation. He was not far-seeing, but he was a shrewd judge of men's characters, and he had a wonderful power of making devoted servants of much abler men than himself.

So he had two Ministers in his reign, Thomas Wolsey and Thomas Cromwell, each of whom served him with unsparing zeal for many years, while they took upon themselves all the blame for whatever the king's Government did that was unpopular. Both of them the selfish king flung on one side the moment they had served his turn. Nearly twenty years after his marriage he wanted to get rid of his wife, so he discovered that it was quite wrong of him ever to have married her, because she had first been married to his brother who died. He managed to marry five more wives, cutting off the heads of two of them. Perhaps they deserved it, but, whether they did or did not, if Henry had been a good man he would certainly never have married those six wives.

The great business of King Henry's reign was the quarrel with the Pope of

Rome. When the Pope refused to undo Henry's first marriage, the king decided that the Pope's authority was never to be recognised any more in England, and that the king was to be ruler over the Church. Then he said the monasteries ought to be destroyed, because the monks were not holy men, as they professed to be, but lived evil lives. There is reason to believe that there was a good deal of truth in that; but what Henry really wanted was to get possession of the great estates that had belonged to them, because he had emptied the treasury.

Henry left a son and two daughters, the children of three of his wives. The son succeeded him as Edward VI. He died six years afterwards, while he was still a boy, and never had much to do with governing the country. He was a very delicate little fellow, and extraordinarily clever. The council which governed during his reign was made up chiefly of men who declared themselves on the side of Protestantism; and young Edward was being brought up as an exceedingly zealous Protestant.

THE PITIFUL MARY AND THE GREAT ELIZABETH

The Protestant King Edward was followed by the Roman Catholic Queen Mary, the daughter of Henry VIII.'s first wife. Her life and her reign were very sad. She had been harshly treated by her father ever since the time when he resolved to free himself from her mother. During King Edward's reign she had hardly been allowed to practise her own religion. When she became queen she believed it was her duty to restore the Roman Catholic faith, and save her people from following what she believed to be false doctrines; and it seemed to her that the best way to save their souls was to burn the bodies of those who taught the false doctrines.

And so Mary, who showed herself merciful to her personal enemies, showed no mercy to the enemies of her faith; and many Protestant martyrs perished in her reign. She is one of the most pitiful figures in the history of England, because her mistaken conscience drove her into cruelty against her own nature. Happily, her reign ended after five years.

Then came the glorious reign of Queen Elizabeth, perhaps the cleverest woman who ever sat upon a throne. In her days the mightiest king in Europe

was Philip of Spain, who meant to crush out heresy—that is to say, the Reformation—not only in his own territories of Spain and the Netherlands, but in other countries too. Now, England was on the side of Protestantism in the contest that was going on between the two creeds. Elizabeth was clever enough to know that Philip intended some day to turn against England, when he had done with his Protestant subjects in Holland. But she did not mean England to fight Spain till England was strong enough to be sure of winning; so she spent half her reign in secretly helping Holland, and quietly doing all the damage she could to Spain.

THE WOMAN'S WIT THAT STRUCK DOWN SPAIN

For all that time she was ruling England firmly, and seeing to it that the men through whom she ruled were honest men above all. Like her father, she had a keen eye for a good servant; but, unlike him, she was generally ready to stand by her servants, and consequently no king or queen has ever been more loyally served. She gave her Ministers an uncommonly hard time, for she scolded them like any fishwife, and boxed their ears when she chose. Worse than that, she had a trick of disregarding their advice, and giving her ambassadors contradictory orders, which more than once seemed on the verge of setting her at enmity with every European Power.

But, no matter how difficult a place she got herself into, by luck or by wit she managed to scramble out of it. After all her waiting, the time came at last when she made up her mind that Spain might be fought with a certainty of victory, and the victory came with the mighty triumph of the English seamen over the Spanish Armada, which made Elizabeth the greatest princess in the world.

JAMES STUART COMES FROM SCOTLAND

She was one of the vainest of women; long after she was fifty she was given to behaving as if she were still a flighty young maiden; and the surest way to her favour was to pay her the most ridiculous compliments. But she had the wisdom never to let her courtier favourites guide her policy or direct her government; and in her day England became the greatest nation in the world.

When Elizabeth died there were no descendants of Henry VIII., and the next heir to the throne was the King of

Scots, the grandson of the grandson of Henry VII., whose eldest daughter had married the King of Scotland. So now James Stuart came from Scotland to be King of England and Scotland too. The shrewd King of France described him by saying that he was "the wisest fool in Christendom," by which he meant that King James had a vast deal of learning and could argue with a keen wit, but was so in love with his own cunning that he was always overreaching himself.

A COWARDLY KING WHO SOWED DISASTER

And on the top of that it is to be feared that he was very much a coward; but the worst thing about him was that he let himself be controlled by favourites who took his fancy, but were utterly unfit to be trusted. There never was a king who thought quite so much as he of the kingly office and the majesty of kingship, and the value of what he was pleased to call kingcraft; nor was there ever one on whom the office sat so absurdly, who was so hopelessly unmajestical, or whose kingcraft did worse service to the Crown. Not that it brought disaster upon him, but he sowed the seed of which his son Charles I., was to reap the fruit.

A very great contrast to his father was Charles I. From every picture he looks out upon us with a mournful dignity; nothing could be imagined more unlike the shambling, undignified, grotesque King James. Nevertheless, he had many of his father's qualities: the same belief in the divine right of kings to govern at their will and pleasure, the same obstinacy, the same inability to choose wise counsellors, the same confidence in his own cunning. But James was crafty by nature, and now and then his craft stood him in good stead. Charles was not in the least crafty by nature, and his attempts to be cunning always failed.

THE GOOD MAN WHO MADE A BAD KING

In private life Charles was as blameless a man as the strictest of Puritans; kind, pious, affectionate, he inspired a very warm love in the hearts of his friends. But many qualities are needed to make a good king which are not often brought to the test in private life. Charles was a bad king. He thought kings were not bound to keep faith and hold to their pledged word; and that was the gravest fault in his character. It was the fault which brought him to his doom; for it

was only when people had become thoroughly convinced that he would hold to no bargain and keep no promise that they came to think there could be no peace or security under him.

The root of all King Charles's troubles was his belief that because he was king he must be in the right whatever he did; that if he could not get his way honestly, it was right for him to get it dishonestly. And, unhappily, what he wanted was generally just what most of his subjects did not want; so that the king, who imagined that the will of the people was of no account, forced them into rebellion, and when they were victorious he tried to win over one group or another to his side by making promises, while he was trying to get help which would make him strong enough to set his promises at naught. So it was that the chiefs of the Army were brought to think that there was nothing for it but to cut off the king's head and set up a republic.

KING OLIVER, WHO REFUSED THE CROWN

Then for eleven years the Government of England was called a Commonwealth, having no crowned king. Nevertheless, when three years had passed, the great commander of the Army, Oliver Cromwell, had really more power than the kings of the past, because the Army put its trust in him and was ready to compel all others to obey his will, knowing that the things he and they desired were in the main the same. And so Oliver Cromwell, by the will of the Army, was made Lord Protector of the Realm of England, being indeed a king just as much as if he had had the crown.

Now, this reign of Oliver Cromwell, which lasted for five years, is the one period in English history when the land was ruled by military force—not by the will of an anointed king, nor by that of a strong group of barons, nor by that of Parliament. Cromwell's rule was strong; he maintained law and justice throughout the land—or at least what he honestly took to be justice; and he made England feared by foreign nations as she never had been feared before. He was a very great ruler, but it was not possible for him to rule at all except as a despot, who was obeyed simply because he could compel obedience. And therefore, though the people of England endured his rule, they would not endure anything of the kind from any lesser man than

Oliver himself. When he died they soon made up their minds to restore the son of Charles I. to the throne.

King Charles II. was the very opposite of the great Puritan Protector. He was so lively, witty, and good-natured that he was always popular; but he was selfish and cunning, and had no ambition to be honoured as a great king and to make the nation great. He cared for very little except to enjoy himself, but he tried to work out plans of his own to make the king independent of Parliament without running any risks of rebellion.

A ROYAL TRAITOR

In fact, to gain his own ends, King Charles sold himself and his country to the King of France, pledging himself to guide England so far as he dared, and so far as he could, without being found out, in accordance with the French king's wishes. He was so clever that he tricked statesmen and Parliaments into doing what he wished, while they had no suspicion of his real aims. Before the end of his reign he got his price from the French king, and was able to set about building the royal power again in England. But he had not had time to go very far when he died, and he was succeeded by his brother, James II.

James was much more like his father than his brother. He was not clever enough, and perhaps he was too honest, to conceal his design of making himself an absolute king, and of reinstating the Roman Catholic religion in England. He set the laws at naught, and tried to punish with a high hand those who opposed his will. He was determined to force Romanism on the country even at the risk of his crown; and he not only risked his crown, but lost it.

DRIVEN FROM THE THRONE

When the people saw that he was determined to go his own way and force his will upon them, leading statesmen from every party invited his son-in-law, William of Orange, the head of the Dutch Republic, to come over with his wife and force King James either to come to terms or to surrender the crown. James found himself without supporters when William landed in England, and he fled from the country. The crown was offered to William and Mary, and they accepted it.

William III. was made king partly because his mother was a Stuart, and he

stood next in succession to the throne after the offspring of King James, but chiefly because he was Mary's husband, and Mary was King James's eldest child. Although he was a foreigner, caring a great deal more about his own country than about England, he proved himself an excellent king, making the good of the state his great aim.

William and Mary died leaving no children, and Mary's sister, Anne, came to the throne. Anne's reign is famous chiefly for two things. One was the great war in which the Duke of Marlborough got so much glory for the arms of England by the wonderful victories he won against the French, of which the greatest was the battle of Blenheim. The other was the treaty by which England and Scotland became one nation with one Parliament, instead of being two nations bound together only by the accident which gave both the same king.

Anne was not a great figure, and the glories of her reign belong to the statesmen and soldiers, and to the group of writers from whom her reign is called the Augustan Age of English literature, because the great age of Roman literature was that of the Emperor Augustus.

THE COMING OF THE GEORGES

Great Britain would not have Anne's brother, a Roman Catholic Stuart prince, for king. The country was determined not to have a republic, but a king who was both a Protestant and of the royal blood of England and Scotland. By that rule, the Protestant nearest in succession was George, the Elector of Hanover, in Germany, the term Elector being a title of the most important princes of the German Empire. So German George, the great-grandson of James I., became King of England when Queen Anne died.

He was more than fifty years old, he did not understand the English language, and he cared a great deal more about Hanover than about England. He was king merely because there was no one else to put on the throne—a sort of lay-figure, who had to do as he was told. He served the purpose for which he was wanted, and left the country to govern itself through Parliament.

His son, George II., learnt to know a good deal about England before he came to the throne, though his youth also had been spent in Hanover. He was not in the least English, and he would still have liked very much to make use of his

British kingdom for the benefit of Hanover, but he was wise enough to give way to the Parliament. Also, it must be said for George II. that he was a man of his word. At the end of his reign he found himself obliged to accept as chief Minister a man whom he disliked extremely, William Pitt; but, in spite of his dislike, he worked with him loyally, and did his best to help the great Minister in carrying out his plans.

In some ways King George did not know how a gentleman ought to behave, but many much worse men have sat on our throne than George II.

FARMER GEORGE, WHO LOST AMERICA

The third George, a very young man when he came to the throne, was born and bred a Briton. In private life he was a very worthy, simple-minded person, and people smiled over the good man whom they called Farmer George. Also, he had any amount of pluck, and was prepared to do what he imagined to be his duty at all costs. But, unfortunately, he was not in the least clever, and he was shockingly obstinate, while he thought it was part of his duty to make people go his own way. He was just clever enough, however, to do it not by fighting against Parliament, but by working hard till his friends in Parliament were in a majority, so that at last the king again became a real ruler.

The first use he made of his power was to force the American colonies into a rebellion, the result of which was that the United States of America separated themselves from the British Empire. His obstinacy did another great piece of harm, when he refused to allow what was called Catholic emancipation, although the Irish had agreed to give up having a Parliament of their own, and to have one Parliament with England and Scotland, on the understanding that Catholic emancipation would be granted.

THE KING NO MAN COULD HONOUR

However, King George did a good thing for his country, and indeed for the world, when he gave his confidence to the second William Pitt, and supported him with all his might in resisting Napoleon. George III. was king for sixty years; but the last years of his life were very sad. His brain gave way, and he became almost deaf and blind; and many of his sons were a great grief to him, because they had not those domestic virtues which were the best thing about the old man himself.

George IV. was known as the First Gentleman in Europe, a title he did not in the least deserve. No one could possibly call him a good man, and the best thing to be said for him as a king is that he did not interfere enough with his Ministers to do very great harm. But he made himself so contemptible in many ways that there were probably more people in England in his reign than at any other time who would have liked to see the monarchy abolished because it had become impossible to honour the king.

We need say little of George's brother, William IV., who succeeded him; an honest and well-meaning man like his father, who was proud of being a sailor, and, though he was obstinate, was not too obstinate to follow the advice of men wiser than himself.

When he died, after a reign of seven years, he was succeeded by his young niece, the great Queen Victoria, who reigned for just under sixty-four years, the longest reign in our country's history. Throughout her long life she worked very hard, and in her later years all Europe looked up to her as the wisest of living sovereigns. As a woman her life was blameless, an example to all her subjects.

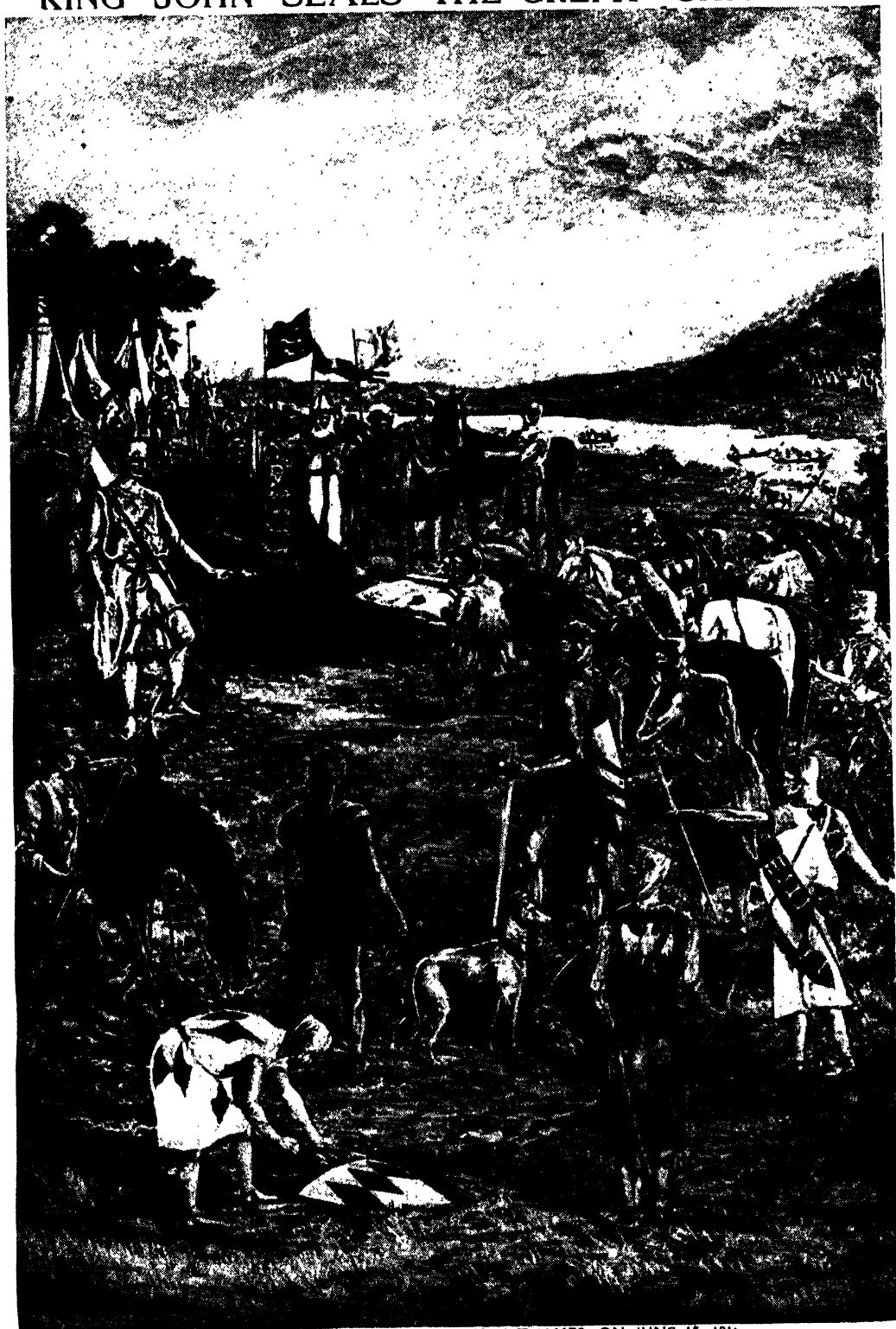
THE RULERS OF OUR OWN TIME

Queen Victoria died in 1901, and was succeeded by King Edward VII., whose death in 1910 plunged the British Empire into mourning. The British people are not in the habit of giving extra titles like the "great" and the "good" to their kings; but to Edward VII. a title of high honour has been given, and men have called him Edward the Peacemaker. Shrewd and wise and genial, all men learnt to trust his counsel, and he had the skill to turn folk from ill-feeling and suspicion to friendliness and confidence.

When Edward the Peacemaker passed away, his son George became king: whom God preserve. For the second time, our monarch is a sailor prince, most fitted to rule over a nation whose greatness depends on her sailors more than all else. It is for the historian to give him his due place in the long line of the rulers of the Island, but we who know his zeal for our country's welfare may be assured that history will count him a king worthy of his high calling, ranking with those whose names the nation holds in honour.

And so we end, as we began, with God save the King!

KING JOHN SEALS THE GREAT CHARTER



CHARTER DAY AT RUNNYMEDE BY THE THAMES, ON JUNE 15, 1215

THE MAGNA CARTA MEN

We are always learning ; the wise man is at school as long as he is in the world. But we do not often realise how slowly but surely knowledge moves and grows and changes our ideas.

Here we see how the light of years has fallen on that great document, yellow with time, which hangs in the British Museum and in one or two cathedrals, and what new views it has brought with it of what we call our Great Charter.

WHEN we first begin to read history we are liable to make the mistake of thinking it has been written, once for all, as a record of the state of mankind in the past, and of things that happened then, and that we may accept it as settled, like the multiplication table. But history can never be written finally ; it must always be re-written from age to age, as more knowledge of the past is gained, and as men change their points of view.

One of the most curious illustrations of this re-reading of history is the opinion now held of Magna Carta, the Great Charter conceded to the English barons by King John on June 15, 1215.

Until twenty or thirty years ago this ancient document was regarded by the writers of our histories as perhaps the chief foundation of English liberty. It was said that on it rests our Parliamentary Constitution and our system of administering the laws of the land. But modern historians take nothing for granted, and when, in a spirit of open-minded inquiry, they ask whether the Charter really is what we have long supposed it to be, they begin to see that a great deal more has been claimed for the Charter than can be made good.

That there should be this difference of view respecting the Charter is curious, because there is no uncertainty about its contents. It can be read by anyone who can read its Latin. Four sealed copies are still preserved—two at the British Museum, one at Lincoln Cathedral, and one at Salisbury Cathedral.

When the men of the present generation were at school they were taught that the Charter is the bed-rock foundation of British liberty and justice, and this teaching was based on the writings of great historians and lawyers. But when we look afresh at the Charter itself, and form our opinions from what we find in it, we can see that our historians have failed to give a true and proper view of it in two ways.

First, they did not form a sufficiently clear picture in their minds of what the barons and others who framed the Charter were trying to do by means of it, or of the meaning in those days of some of the language used in the Charter. Then, in the next place, the minds of the historians and lawyers were filled with thoughts of struggles for liberty and popular government which occurred centuries afterwards, and they tried to find a more ancient legal foundation for the rights which men were winning later.

If they could show that these rights were actually named and respected in the Great Charter they were endowing them with age and veneration ; and this they tried to do. What the historians claimed to find in the Charter was accepted and repeated, and became a kind of historical gospel which no one questioned. But when we re-examine the Charter for ourselves we find that too much was claimed on its behalf by historians, and our liberties were really a later growth. If we see who the men were who won the Charter from King John, what they thought about it, and what they meant it to be, we shall come near to the real meaning of it.

To understand the wide difference between the government of England in King John's reign and the government now, we must know that justice was then decided in two kinds of courts. There were the king's assize

THE CHILDREN'S TREASURE HOUSE

courts for serious cases, corresponding roughly with our present assize courts; and for all kinds of minor offences, particularly such as related to property, corresponding roughly to our police courts and county courts, there were the lords' courts, held on behalf of the lord of the manor in each district, and presided over by the lord's steward. To these courts under the local "lord," who was the

landowner holding his land from the king, all freemen had to come, and assist to keep order and uphold the customs of the district, for there was no Parliament making written laws. The kings made their demands upon the lords; the lords made their demands upon their sub-tenants, and upon the freemen who held land from the lords on condition that they gave the lords the same kind of service that the lords gave to the king.

Thus, it was undisputed that the king could claim a large fee whenever an estate passed from one of the lords by death to his heir; also that if the king were taken prisoner he could claim that his ransom should be paid; and if he went to war a council of the barons could be called together and agree that all who held land from the king must support him with their

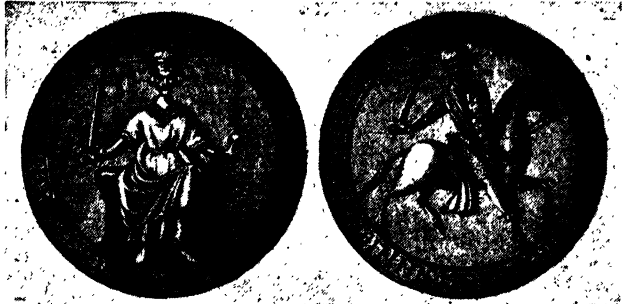
own warlike services and a body of men corresponding in numbers with the extent of their land, or if they did not do so they must pay enough money to hire mercenary soldiers.

All these demands were transmitted by the lords, or great landowners, to the tenants and freemen living on their estates. They had to pay fees to the lords when they entered into possession of lands held

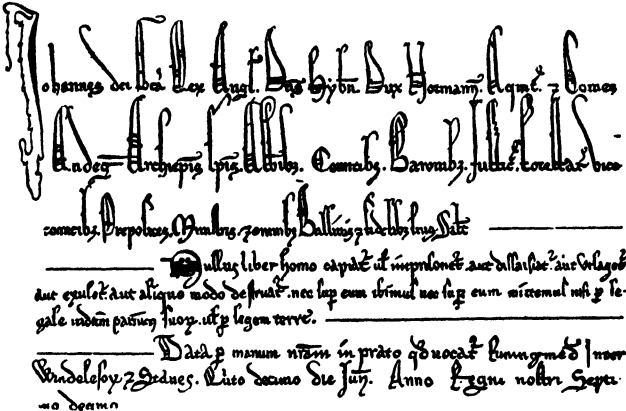
by their fathers. They had to ransom their lord from captivity; to give him money when his eldest son was knighted and when his eldest daughter was married; and to follow him to the field of battle when he summoned them, or pay for a substitute. In fact, each of the lords was not unlike a little local king, intermediate between the king and his people, except that the king sent round justices or judges to deal with serious crime,

or appeals could be made to the king's court against grave injustice.

But underneath all this was the great fact that the larger number of Englishmen were neither lords, nor their tenants, nor freemen living on the lords' lands and owing them service, but were serfs, under the lords or their tenants, with no right to appeal to the courts at all, unable to



THE SEAL WITH WHICH KING JOHN SEALED THE GREAT CHARTER



HOW MAGNA CARTA WAS WRITTEN—EXTRACTS FROM A COPY POSTED UP IN THE COUNTRY IN 1215

The top three lines are from the opening words, stating that John gave the Charter to the prelates and barons; the bottom paragraph is the attestation—"given in our hand," etc.; the middle paragraph is among the most important legal foundations of British liberty, saying—

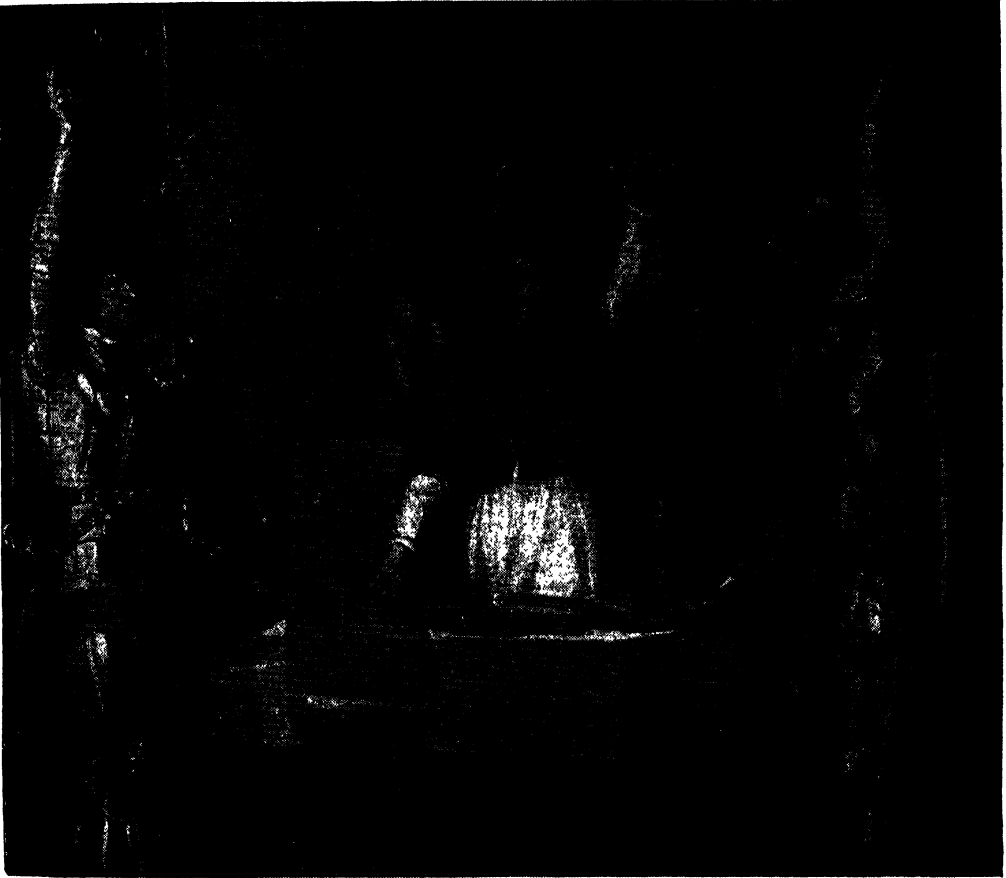
No freeman shall be arrested or kept in prison, or deprived of his freehold, or outlawed or banished, or in any way molested, and we will not go forth against him nor send against him unless by the lawful judgment of his peers and by the law of the land.

THE MAGNA CARTA MEN

leave the place where they were born, and bound to give such service as was demanded of them by whoever rented the land to which they were attached. Indeed, they were slaves, except that they could not be sold.

Outside of these lords, tenants, freemen, and serfs were two other classes—namely, the traders and craftsmen, who were freemen and were gathered in the towns, and also the

but were almost the opposite of that. They were advantages given to a particular class of people, allowing them to do what others were not allowed to do, or exempting them from doing what others were obliged to do. In fact, they were special privileges or perquisites, bestowed by a king on certain people, or towns, generally in return for some service that had pleased the king.



THE BARONS MEET AT OXFORD AND DECLARE AN OATH THAT THEY WILL FORCE THE OBSTINATE KING TO GRANT THE GREAT CHARTER

clergy, who lived chiefly in religious communities and always tried to be governed by rules of their own. To the clergy and the men of the towns, as well as to the lords, the kings from time to time granted special privileges by charter, or written agreement, and these privileges were known as "liberties." Liberties were not then common rights granted to all men alike, as we understand liberty now,

But such "liberties," or special rights, allowed to men who had power, might be a great disadvantage to the mass of the people who had no power, and it was so in the domains of many of the lords or barons. Their "liberties" often meant more freedom to do as they liked with the people who were in their power, and had no "liberties."

So much was this felt that before and after the reign of King John the

THE CHILDREN'S TREASURE HOUSE

great bulk of the people, the subtenants and freemen, often the traders, and presently the serfs, who were gradually, as time went on, drawing nearer to freedom, looked more and more past the lords' courts, and away from the local "liberties," for a truer justice from the king's courts, where wiser laws and customs were being established. Thoughtful kings began to see that their weakness came from powerful and ambitious nobles entrenched behind their so-called "liberties," and that their own strength lay in doing justice to, and relying on, the whole community of Englishmen, and broadening out the liberties till they were the common rights of all. We must bear all this state of things in mind if we are to understand the Great Charter, which had as its chief aim the confirming of the "liberties" possessed by the barons.

It may be thought that what is being said here looks like the beginning of a proof that the Greater Charter was a bad, and not a good, thing, but that is not so. It was a good thing; but not good in the manner, or to the extent, that has sometimes been taught. It was made urgently necessary by the fact that John was a thoroughly bad king, and only the barons had the power to check him. In protecting themselves they were protecting the whole nation to a considerable

extent. By resisting his tyranny they made all tyranny more difficult; and on their own behalf they made claims which have since been made and upheld on behalf of all of us.

John began to reign 133 years after the Norman invasion and conquest of England, and by that time the Norman nobles, who had been given English lands, were beginning to feel that England and not France was their home. But John's ambition was to extend his hold on France, instead of

letting more and more of it slip out of his grasp. The barons disliked being summoned to fight in France in the king's quarrels, and instead paid heavy exactions of money to the king, who used the money to hire professional foreign soldiers. Frequently fighting and almost always losing, John, who was greedy and base as well as ambitious, needed constant supplies of money, and to get it he



THREE OF THE MAGNA CARTA MEN

The central figure is the effigy of William Marshal, Earl of Pembroke, on his tomb in the Temple Church, London.

practised many dishonest tricks.

He demanded money from the barons which the Great Council had not agreed he should have; he imposed heavy fines, seized and used the revenues of rich orphan boys who were his wards, and of widows who were under his guardianship; kept the revenues of Church lands for himself, and would not assent to fresh religious appointments. So in innumerable ways he oppressed all his people, for when he made unjust exactions from the lords

THE MAGNA CARTA MEN

of the land they, no doubt, partly assuaged his rapacity by collecting more from their tenants and subordinates. We can see well enough what John's misdeeds were, for the Great Charter was drawn up to say what he had been doing wrong that must not be done again. The Charter was not, except in a minor degree, a forecast

whom no one could trust, a man who was perpetually working for some underhand purpose, and was as slippery as an eel in all his doings.

His right-hand man was William Marshal, Earl of Pembroke, or William, the Earl-Marshal of England, a noble soldier, the pattern of chivalry, and a loyal supporter of his king, as far as



THE BOLD BARONS AND THE BAD KING

looking into the future for wiser forms of government; it was a protest against the injustice that had been rampant in the immediate past.

When the Charter was sealed four men stood out as the men of the hour before the eyes of all observers. There was John, the ambitious, cunning, but mean and unscrupulous king,

anybody could be honourably loyal to a deceitful tyrant. This fine statesman used all his influence with John to induce him to sign the Charter and to alter his methods of government. And the year after, when John died, the Marshal was made regent of the kingdom and the guardian of John's young son, who reigned as Henry III,

THE CHILDREN'S TREASURE HOUSE

Then Pembroke caused the Charter to be confirmed. Indeed, it was in this reign that it actually was entered on the statute books as a law of the realm, officially known as *Cap. IX. Henry III.*

Next among the great men of the period was Sir Robert Fitzwalter, another brave soldier, who was connected with the City of London and represented its interests. When John tried to disown the Charter, and the barons had to make war on him, Fitzwalter was chosen as their general. Though he was defeated and taken prisoner, his cause triumphed.

The Great Archbishop, Stephen Langton, who Protected the People

The third and perhaps the greatest personage of the period was Stephen Langton, Archbishop of Canterbury, who appeared partly as the defender of the interests of the Church, but also as a wise and patriotic Englishman bent on securing his countrymen against oppression and tyranny from the hands of such men as King John. Langton was chosen Archbishop of Canterbury in 1207, but for six years had to live abroad, because John would not acknowledge him as archbishop, or allow him to enter the kingdom.

Two years before the Great Charter was drawn up, Langton was reconciled to John, and took up his work as archbishop, but he at once upheld the cause of the wronged and oppressed, and used his influence to bring the king to juster views of his rights and duties. Though Langton lived much abroad in his early life, and gained a European reputation as a Churchman, writer, and preacher, he was a faithful Englishman in the days when the national spirit was only just beginning to emerge from the damping effects of the Norman Conquest.

How the Charter Stopped the Greed of the Robber King

What was it that these men and their friends among the barons, the Churchmen, and the townsmen tried to secure through the Great Charter which King John signed so reluctantly and tried to repudiate so promptly? By far the greater part of the

Charter was designed to check the greedy exactions of the king. Its provisions declared that only the ancient customary dues should be paid to the king, the amounts being fixed; that "aids" should not be demanded except with the sanction of the Council of greater barons, lesser barons, and prelates; that wards and widows should be protected against their kingly guardian; that taxes should not be farmed out to collectors; that the king should not take without payment corn and provisions when he travelled; that lands unjustly seized should be restored, unreasonable fines be remitted, and hostages held to ensure good behaviour should be released. The king, too, was forbidden to summon the barons to his service with unreasonable frequency, or to claim money in place of service where service could be rendered. He must also dismiss his mercenary troops.

The Great Clause of the Charter that Saved the People's Rights

Though these defensive arrangements made up the greater part of the Charter, there were also proposals of a more expansive and constructive character. Freedom of election was conceded to the Church; the rights and customs of the City of London were renewed and preserved; and travel for purposes of trade was allowed without payment of excessive tolls. Then, lastly, certain demands respecting the administration of justice looked forward to the future, in part, and have had a lasting value. The clauses relating to carrying out the laws were not, however, all good. Suits relating to property were still to be tried in the lords' manorial courts, and not by the judges of the realm. The so-called "liberties" of the barons were preserved. Also all men, even all freemen, were not made equal in the eyes of the law, for they could only be judged "by their peers," the word peers meaning equals. Thus, princes could claim to be judged by princes, barons by barons, and freemen by freemen. They were not all under one common law interpreted by independent judges.

THE MAGNA CARTA MEN

Still, the legal conditions laid down in the Charter were on the whole notable and progressive. It was decided that the Court of Common Pleas, the king's court of law, must meet at one place, as it meets today in the London Law Courts; that judges should hold assizes regularly in each county, as they hold them today; that punishment should be by law, and in amount should not be

be arrested or imprisoned, or dispossessed of his house, or outlawed, or exiled, or in any way proceeded against except by the legal judgment of his equals, or by the law of the land."

Forty was a noble expression of a sound spirit of pure government: "*To none will we sell, to none will we refuse, to none will we delay right and justice.*"

These pronouncements showed how sound at heart was the English sense



KING JOHN GIVES WAY AND SIGNS THE GREAT CHARTER

ruinous; and that legal justice should be the right of every freeman.

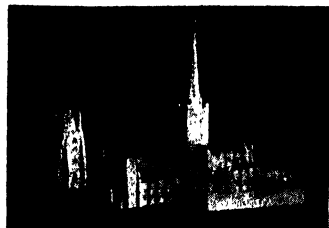
The three vital articles of the Charter relating to the law were numbers 20, 39, and 40.

Twenty said: "*No freeman, merchant, or villein (working man) shall be excessively fined for a small offence; the freeman shall not be deprived of his means of livelihood, the merchant of his merchandise, or the working man of his tools.*"

Thirty-nine said: "*No freeman shall*

of right, and they breathed a spirit that since has been expressed clearly in our laws, but they did not establish popular government, nor define *how* justice should be secured. That was the work of later centuries; but the Charter, by its check on tyranny, and by its bold claim for pure legal judgments, was a fine inspiration, and it grew to be regarded almost as semi-sacred through its formal renewal at the accession of every British sovereign.

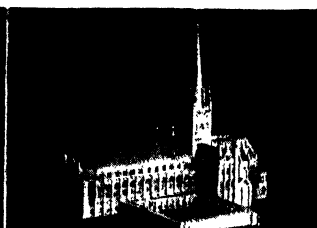
LITTLE MODELS OF EIGHTEEN CATHEDRALS



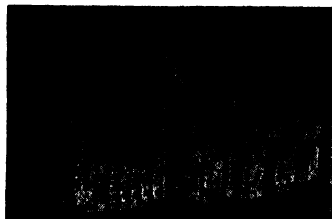
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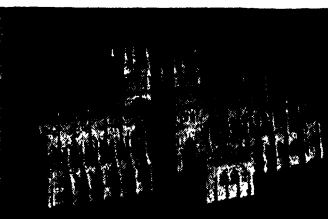
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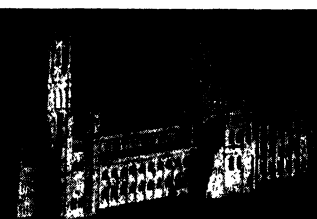
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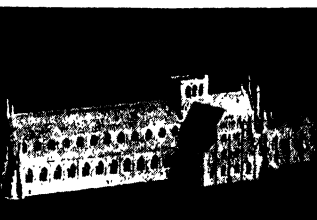
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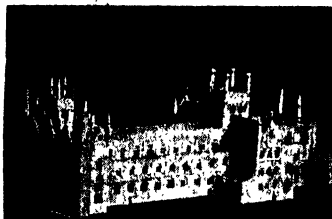
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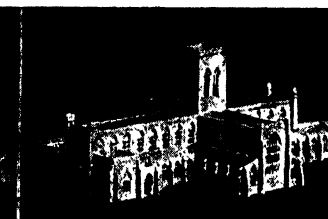
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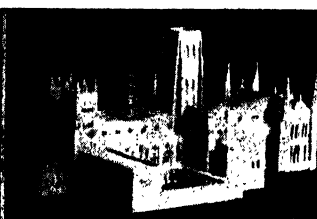
WINCHESTER



PETERBOROUGH



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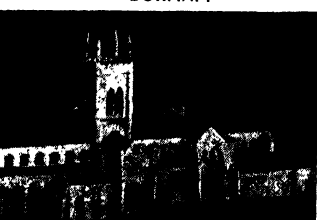
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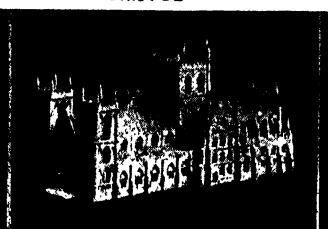
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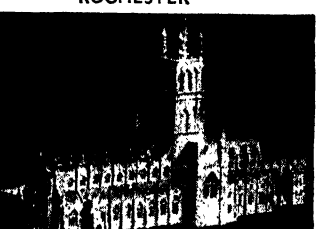
ROCHESTER



WELLS



RIPON



GLOUCESTER

EACH OF THESE MODELS OF ENGLISH CATHEDRALS IS SHOWN HERE IN THE PROPER PROPORTIONS

THE CATHEDRAL BUILDERS

THE cathedrals of our country are very beautiful, but many of them are more than things of beauty. They are a record—the only record we have—of the joyful feelings of our forefathers in the days when they were recovering from the tyranny of their Norman conquerors.

Our native literature of that time is mainly a copy of French ideas, written largely in French for kings and nobles who could not speak English. It does not enable us to understand what was happening to our ancestors in their patient striving for freedom. Many of them were dumb serfs ruled by foreign lords of the manor and foreign abbots of the monasteries. It was only when the enslaved English peasant was handed a chisel and ordered to work on the great stone churches that he could hand down to after ages some record of the new spirit of liberty that was then beginning to breathe in England.

What is it we read, then, in the stories of our old churches? It takes a great deal of study to learn the details of the art of the Early English builders, and a considerable amount of knowledge is needed to understand the dates at which the various parts of a cathedral were built. Not only must the styles of each period be studied, but the inquirer must wander over England and compare the work of masons labouring at the same time in different parts of the country.

Then, indeed, the examination of our old churches becomes a fascinating thing, turning every holiday into a delightful adventure, and making a man thrill with joy at this contact with the work of the humble forefathers of our race. For here, coming from the carving on a pillar, or from a weathered statue above a porch, is the voice of some poor dead English working man speaking down the ages of the new energy and gladness that entered into his life. Probably he was born a serf, as his grandfather was, but in youth his parents managed to prentice him to some mason, and, learning his art, he grew into

a free craftsman with the soul of a poet. Like his fellows, he was a great man without knowing it, but he felt to the full the joy of creating a new beauty in the world. As a grown-up labourer he worked for ninepence a week, and at the height of his power he seldom received as much as two shillings a week. At this wage he would carve and sculpture as well as build; and he was evidently contented.

Money had actually different values then, and a greater purchasing power than it has now. The English mason of those days had good wheaten bread to eat and plenty of bacon; his home was a wooden hut, very poorly furnished, and generally it was used only as a sleeping-place and shelter.

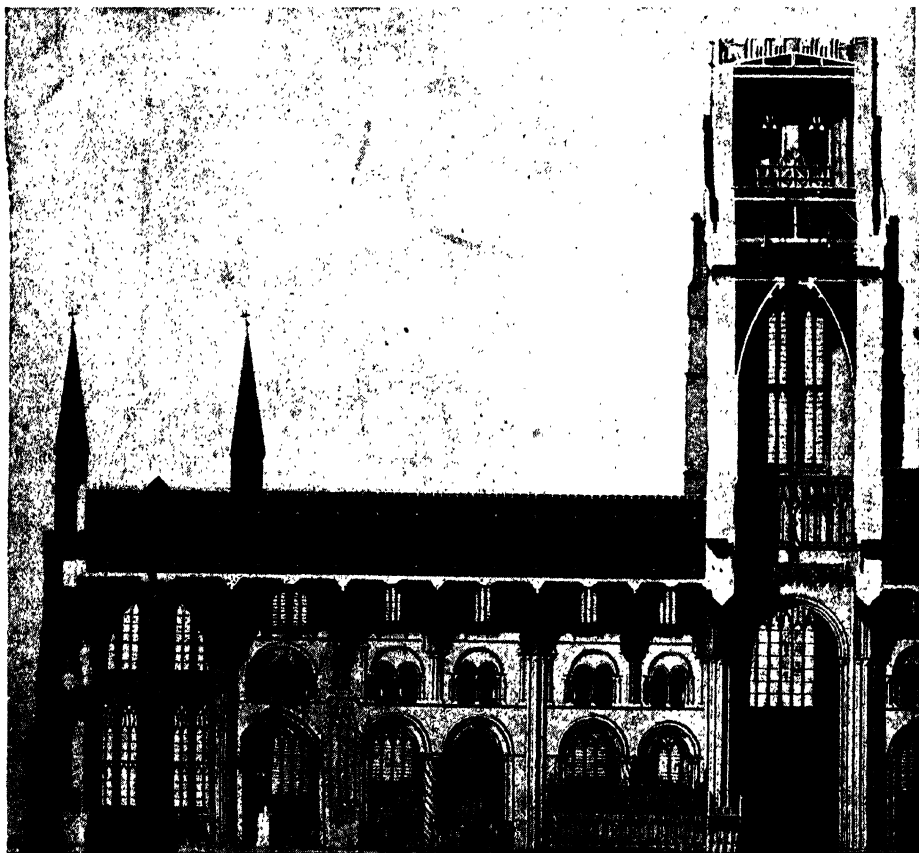
Like most Englishmen of his day, he lived as much as possible in the open air. The modern navvy is a man of his stamp. But, rough as his ways were, his soul was great and noble. Money, food, clothing, and housing were only the accidents of his life. What he lived for was a vision within him which he continually strove to translate into stone. In reality he was one of the great ones of the earth, claiming the sculptors of ancient Greece as his kinsmen.

It is easy to tell if an English cathedral was built by freemen or by serfs, for the work done in the joy of liberty is wonderfully beautiful, while that done in the age of oppression is rough, gloomy, and often bad in workmanship. When the Normans conquered England, our race was excellent in painting and skillful in carpentry, but generally unused to build in brick or stone. It was the masterful Norman who taught us masonry, and the lesson was a very painful one. Like our most ancient castles, that crumble in flowery ruin along our rivers and on our hills, our very oldest cathedrals are monuments of slavery and defeat. They were built under the whip of a foreign taskmaster, intent on raising edifices to keep a vanquished people in subjection and order. What William the Conqueror won by the sword he guarded

THE CHILDREN'S TREASURE HOUSE

by means of the crozier. Behind his army of foreign soldiers followed a host of foreign monks, who were established at all points of danger to hold in check the conquered population. So the disaffected fen-lands were overlorded by the great abbeys of Norwich, Bury, Ely, Crowland, and Peterborough; and along the marshes of Wales a chain of monastic houses, like Gloucester, Tewkesbury, and Worcester, formed a wall against the unconquered races. The ancient capitals—Canterbury, Rochester, and Winchester—were made the seats of Benedic-

may have consisted more of blows than words. For the monk could only speak French, and the peasants knew only the Anglo-Saxon speech. It looks as though most of them could not be taught how to use a chisel, for in many of our Norman cathedrals the rough stone blocks have evidently been put into their places without being dressed. In all cases the unskilled labour of the untrained Englishman is apparent. The axe is used more often than the chisel; everything is built in the easiest way, and the lack of knowledge and craftsmanship



THE GLORIOUS CATHEDRAL THAT STANDS ON A HILL IN DURHAM, 800 YEARS OLD AND NEARLY

tine convents, and Norman bishops were appointed as abbots. Each was a settlement of foreign monks, who upheld the rule of the Norman.

The English people supplied only the untrained labour necessary in building castles and churches. Practically the entire population of the countryside was employed. They worked in gangs under one of the foreign monks. The monk began by showing the people how to quarry and dress the blocks of stone, and in many cases the lesson

is covered by a rude, massive strength. One pier of Durham Cathedral, for instance, contains enough stone to build half the pillars of Westminster Abbey. Yet, in spite of the immense thickness of piers and walls, the Norman cathedral had an inconvenient habit of tumbling down, for it was the work of ignorant and ill-treated serfs.

But, by one of the most remarkable chances in the world, an English labourer in this age of taskwork managed to revolutionise the whole art of architecture, and

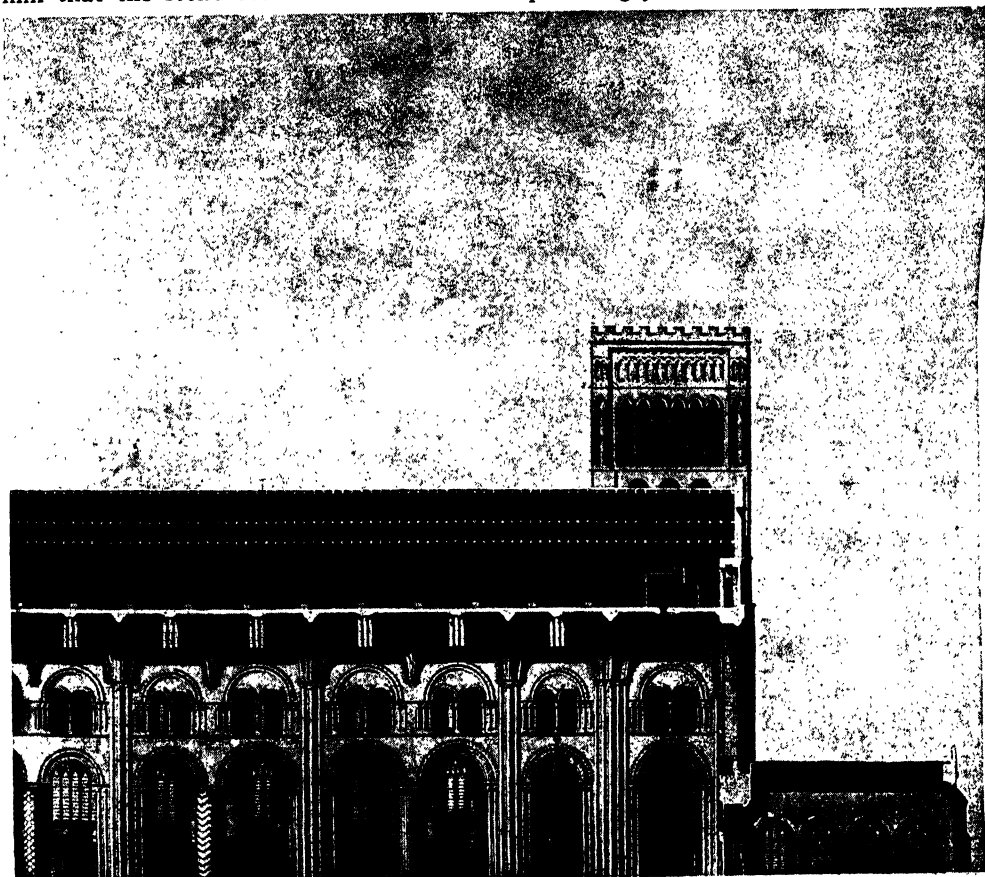
THE CATHEDRAL BUILDERS

prepare the way for the most beautiful of all the works of men—the Gothic church of the 13th century. Out of weakness and need came forth strength and loveliness.

It was an unknown English carpenter at Durham in 1093 who brought about the great change. He had to build the wood-work which served as a temporary support for the erection of the stone arches that roofed the building. He had first worked in the neighbouring quarry, cutting gritstone for the cathedral, and it evidently struck him that the stone could be cut in much

same way as the steel ribs of an umbrella support the silken covering.

News of the discovery quickly spread through England, and the new and easy system of rib vaulting was soon used at Gloucester, Norwich, and London. At a leap, our backward country soared a generation ahead of the rest of the world in the science of building. It is only a few years since the date of the rib vaulting in Durham Cathedral was finally established. Even now some Frenchmen are quite angry at what they consider the



A TENTH OF A MILE LONG, SHOWING NORMAN AND GOTHIC ARCHITECTURE SIDE BY SIDE

longer slabs than the foreign foreman used. He was quietly thinking of this as he laboured at building his wooden scaffolding, which was then a more laborious job than erecting the stone arch above it. To save himself time and trouble, therefore, he built his scaffolding of stone instead of wood, and then filled in the framework with thinner and lighter slabs of grit. In this way he made a vault resembling an open umbrella; for his framework of stone ribs supported the lighter filling-in in much the

ignorant, pretentious claim made on behalf of an obscure English workman on the River Wear in the 11th century, for until lately men of authority all over Europe were agreed that the principles of Gothic architecture were a French invention of the 13th century. This architecture, indeed, was held to be the highest achievement of the French people, which entitled them to rank as the supreme masters of beauty, superior in some respects to the ancient Greeks. But after a long discussion, in

THE CHILDREN'S TREASURE HOUSE

which even American professors have sided with the French critics, it has been proved that the men of Durham worked out, first of all builders in the world, the main principle of Gothic architecture.

Who was the man who did this marvelous thing? We do not know. All that can be said on the matter is that it was a problem for a carpenter with a knowledge of the special qualities of the gritstone of his native quarry. He was not a great thinker, for he did not develop his ideas. He merely aimed at reducing the cost of constructing the wooden mould for the ordinary round stone vault, and the men who adopted his device kept to this practical point of view. So the way was prepared for the great change, and nobody knew or suspected it.

But, having roughly overcome his first difficulties in the new craft of stonework, the English mason began to grow deeply interested in his trade. He gradually freed himself from the rule of his Norman teachers, and took to working out details himself. Schools of masonry arose in every cathedral town where building was continually going on, and each school had its special way of doing its work.

In the meantime the English mason fought his way to freedom in life as well as liberty in art. In his schools he joined his fellow-workers in a kind of trade union, and became a free craftsman, with a guild at the back of him to protect him from tyranny and help him in sickness and trouble. Then

the leaders of his guild met the leaders of other unions of tradesmen and working men, and, by acting together, the guilds at last established a system of self-government in the large towns, so encouraging the spirit of freedom that at last it undermined the form of military government established by the Normans.

The English mason was one of the chief apostles of the new spirit of liberty. Unlike most craftsmen of his day, he was often a traveller, moving from place to place as new buildings were wanted by bishops, monks, and castle builders. Everywhere he went he was joyfully received by the

people. From king to peasant, everybody was eager to help in building. It was the absorbing passion of the nation. The mania for constructing railways which swept over England in George Stephenson's time seems tame when compared with the passion for building churches which uplifted our forefathers in the twelfth century. Plagues and famines sapped the strength of the people; the Crusades called for heavy sacrifices of life and treasure; but pilgrims still flocked in great multitudes to

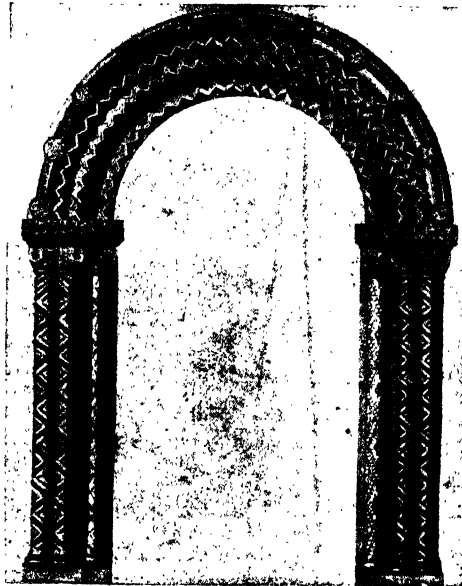
the cathedrals and abbeys rising all over the land, and brought with them offerings to help in the building.

When new orders of foreign monks came to England and tried to build their churches in their own way, they met with many difficulties. The English masons became strangely stupid; they did not understand the orders given to them, and, obstinate as mules, they went on building in their own way. When the foreigners brought over their own builders, the people stayed away from the fine churches these builders set up, and sooner or later the monks had to pull down part of their work and give the people what they wanted. The result was that our churches

became peculiarly national, differing in plan from those of other countries. Inside they are much smaller than the great French and German cathedrals of a later date, but the English mason had a strange power of giving his work an air of mystery and noble suggestion, so that an Early English cathedral, like Lincoln, looks bigger than it really is.



A SMALL SCULPTURE OF NOAH AT WELLS CATHEDRAL



A BEAUTIFUL NORMAN ARCH

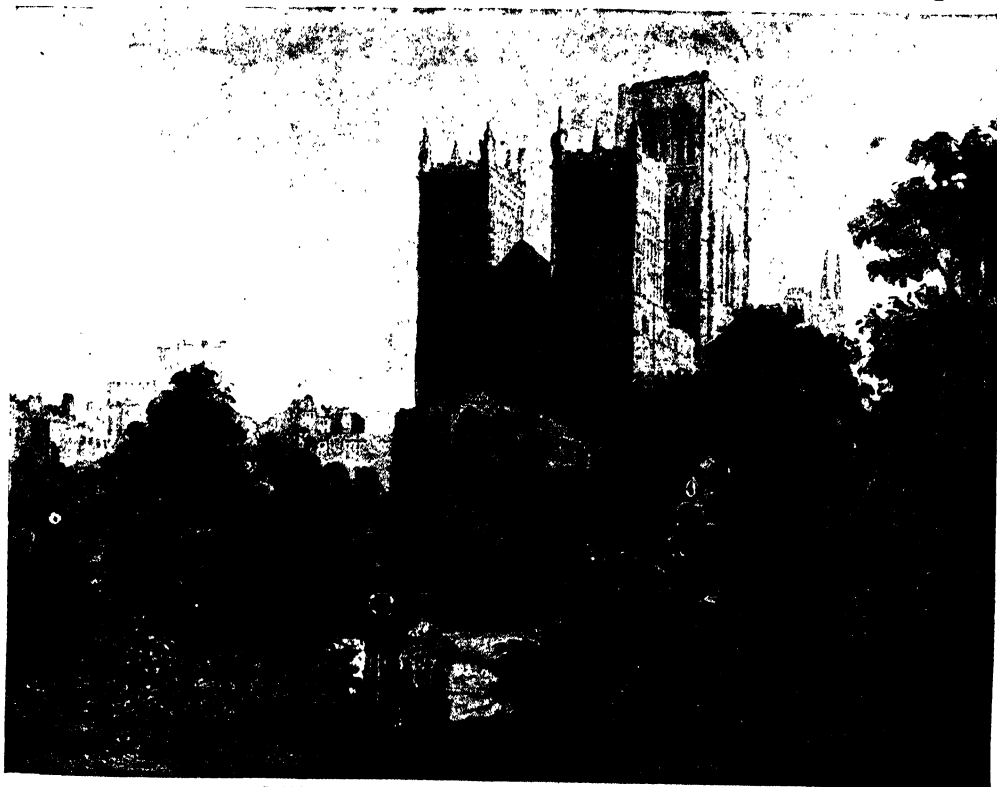
THE TOWERS & SPIRES OF THREE CATHEDRALS



THE THREE SPIRES OF LICHFIELD



THE WESTERN TOWER OF ELY CATHEDRAL



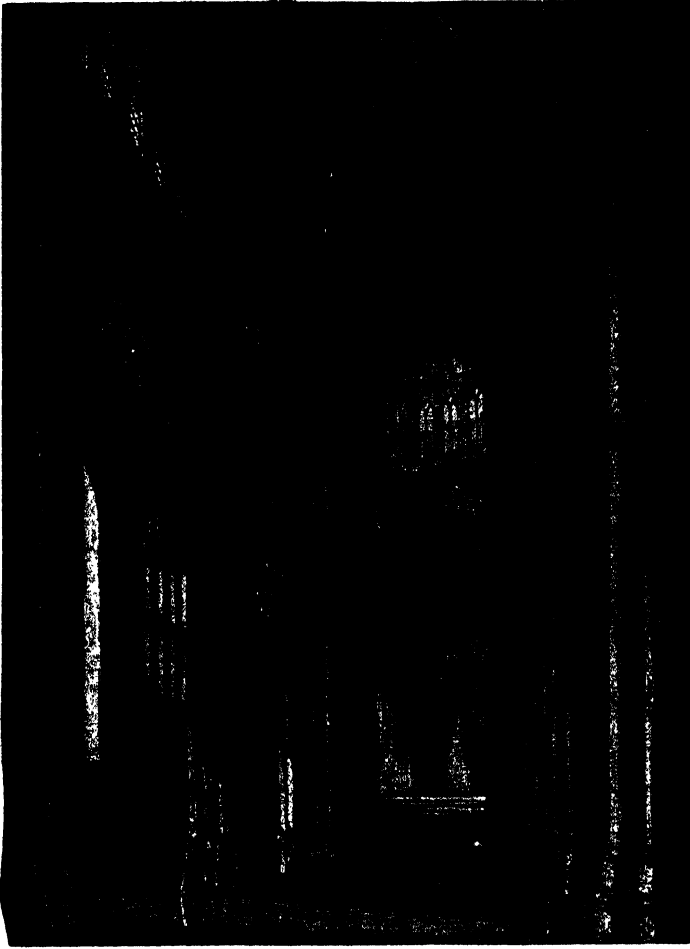
DURHAM CATHEDRAL AND ITS THREE TOWERS

The photograph of the little sculpture of Noah on page 146 is by Mr. T. W. Phillips, of Wells.

THE CHILDREN'S TREASURE HOUSE

And in picturesqueness and quiet stateliness—two qualities difficult to unite—the work of the English mason is hardly to be matched in any part of the world.

The extraordinary thing about our workmen in the Gothic Age was that they were all fine artists. A sense of beauty became the common heritage of the common people. They delighted in their glorious buildings, and it seems to have been impossible then for anybody to make an ugly thing.



THE IMPRESSIVE NAVE OF CANTERBURY CATHEDRAL

We do not know the lives of any of these builders of the new age; their joy in their work was enough for them. Now and then we can recover some of their names from the account books in which their wages are recorded, but the honour of the work went generally to the monks, bishops, and officials who paid for it. The master mason who designed and directed the building remained in obscurity,

together with the craftsmen who dressed and carved and sculptured the stone.

Naturally, the masons and marblers to whom the fine figure-work was given were men of special genius. They must have slowly worked their way up from labourers to dressers, and used their chisel in carving the top of pillars so well that their foreman asked them to do some more important pieces of carving. But neither they nor their fellows saw anything remarkable in

being able to chisel a statue of wondrous beauty out of freestone. It was just an interesting piece of work, and the man who did it never thought of carving his name on it. Very likely, in his next piece of work, he would be doing ordinary stone-laying. Two magnificent statues in Westminster Abbey are entered in the wages roll as "two figures dressed by the job." They can still be seen on each side of the door of the chapter house—a Virgin and the Angel of the Annunciation. They may stand beside any architectural sculpture in the world, for in elevated expression and action they are unsurpassed. But the man who made them is unknown, except for the fact that he received £2 13s. 4d. from King Henry III., this being the price fixed by him for the piecework.

Working by the day, he would have got only twenty-two pence a week for his labour. He was well content to go on with his chiselling just as he

liked, in his shed near the Abbey, with no foreman passing up and down to hurry him on. He was able to put forth all his powers in expressing his vision of the mother of Jesus listening to the messenger from heaven. High up in the transepts of the Abbey are angels swinging censers—figures of the same remarkable beauty. They are the work of John of St. Albans, who, in 1257, made the Abbey a training school

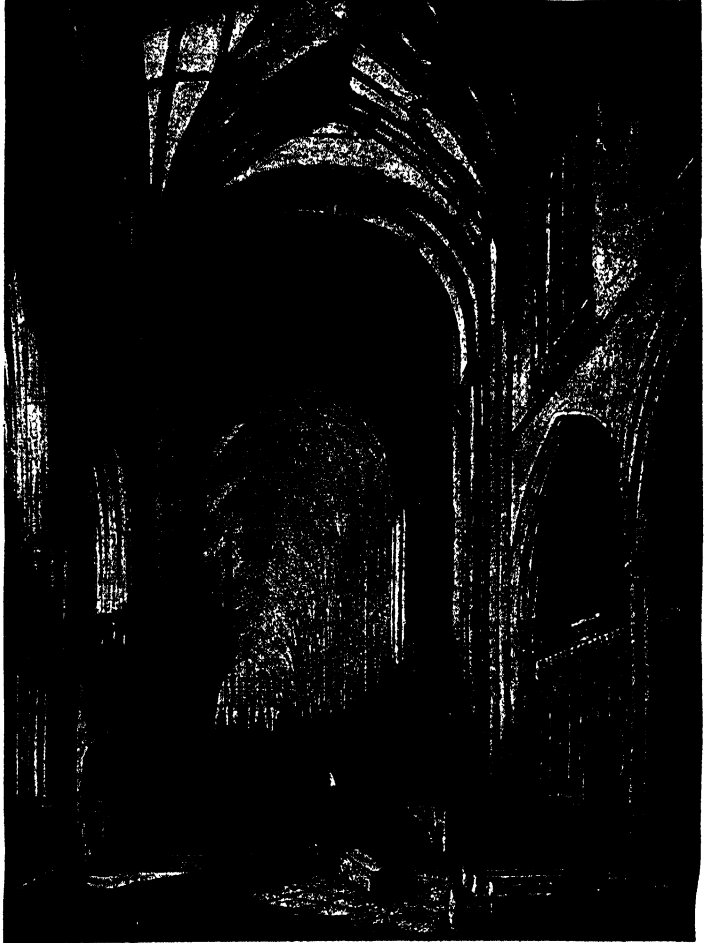
THE CATHEDRAL BUILDERS

for mason sculptors. John seems to have started as an ordinary workman at twenty-two pence a week. We know more about him than about any other cathedral builder of the best period in our country, because one of his masons has left a fine portrait of him in the Abbey. Having to carve the stone support of an image in the north transept, the mason chiselled out the face of his master, and the work still remains in good condition. It is a face of great nobility and power—the face of a man with as much poetry in him as Shakespeare had. And at the height of his fame John “dressed figures by the job” at £2 13s. 4d. a couple! Yet not only was he as fine a sculptor as any man now living, but he could have taught Phidias of Athens something that the Greek did not know when he was carving at the Parthenon.

Like all English masons of his age, John was severely practical. He was essentially a builder in stone, and he built his statue into a building, so that it became a part of a living whole. It was not an ornament that could be removed and admired in itself, but a bit of carved stone made for a monumental purpose and designed for the place in which it stood. If it were high up on the cathedral front, it was broad in treatment and meant to enrich the stonework around it. Its bold, free handling would lose nearly all its beauty if it were out of the place for which it was designed.

But there came a decline in the English Age of Building; it came when the best masons took to chiselling statues in some city shop, and selling them to any builder who would pay for them. It was, no doubt, more profitable than sharing the labour of other workmen when the church was not ready for statues, but it seriously diminished the general effect of the cathedral. In this and other ways the artist came to be

separated from the working man, lowering the whole style of craftsmanship. Happily, it was long before the separation was complete, and for many centuries our masons continued to build nobly and well. For a time they were surpassed by the French masons, who, building upon our English foundations, carried Gothic architecture to its supreme height. Thrown back in civilisation by wars, the French were later in building their cathedrals



THE NOBLE CATHEDRAL OF WINCHESTER, THE OLD CAPITAL OF ENGLAND

than we were, and, profiting by the work done by our masons, they developed the new principles so freely, and so completely surpassed us, that the rest of Europe came to them for instruction.

Our great building king, Henry III., tried hard to introduce the new French style into England. A London master mason, Henry of Westminster, seems to have gone to Paris to study the new

THE CHILDREN'S TREASURE HOUSE

methods for the king, and to have designed and begun Westminster Abbey on his return; so we now have in this famous church a fine example of the French manner of building. But the men who built it were Englishmen, and apparently they did not altogether approve the new style, for they never employed it in any other buildings of the time. Having

pleased the king in regard to the great Abbey, they kept afterwards to English ideas, which were simpler and much sounder.

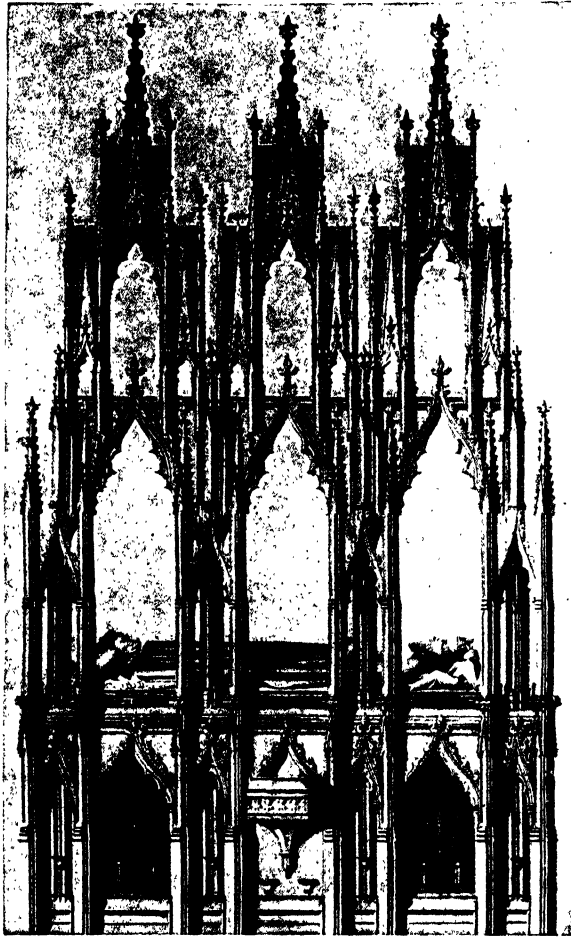
In French architecture, a church has, we may say, its skeleton outside it. That is to say, the weight and thrust of the great stone roof are carried outside the church by means of arches that leap over the low side roofs and end in strong buttresses.

Flying buttresses are a feature of Westminster Abbey; they leave the walls with no work to do, so that great windows, with beautiful stained glass, can be used to illumine and glorify the interior. But the English masons were afraid that the exposed stone work of the flying buttresses would decay and bring the building down. So they kept their walls fairly strong, and roofed in their arching buttresses from the weather. In this way they produced, at Salisbury, the typical English cathedral of the great Gothic period.

But the English masons triumphed in the end. In the fourteenth century their art spread to Brittany and extended its influence into Normandy, and was at last adopted in Northern France. It seems to have been the masons of the beautiful

cathedral of Exeter who achieved this remarkable spread of English ideas. Then, by an extraordinary disaster, the men of Gloucester became the directors of architecture throughout England. When the Black Death swept over the country, destroying the people, Gloucester, by a happy chance, escaped with little hurt, while in some other parts of the country seventy-

five out of every hundred persons were cut down by the terrible disease. Labour became so scarce that building completely ceased for some years, and only at Gloucester did sufficient masons remain to proceed with the cathedral during all the visitations of the Plague. We find the peculiar style of the Gloucester men appearing in the nave of Canterbury, in the choir of York, and at Exeter and Norwich. By the end of the fourteenth century the style of the Gloucester men had become a national habit of building—now known as the Perpendicular—and it lasted right to the end of our Gothic ages of architecture. It was the craftsmen of Gloucester who



THE BEAUTIFUL GOTHIC TOMB OF KING EDWARD THE SECOND, IN GLOUCESTER CATHEDRAL

worked out the new style, and taught it to other English masons, who, in their turn, covered our land with picturesque village churches. Their work came to an end when King Henry VIII. turned the monks and nuns out of England, leaving so many empty churches to moulder into ruin that no new cathedral was needed till the Fire of London destroyed old St. Paul's. Since then the old English mason has disappeared from our English buildings, but his hand is impressed for ever on the face of our land.

HOW THEY CAME HOME

HOW NELSON CAME FROM TRAFALGAR

NELSON came home from Trafalgar in a coffin made from the mast of a ship that he had captured in his victory of the Nile. The battle of Trafalgar, Nelson's crowning triumph, put an end to Napoleon's great scheme for invading and crushing England; Waterloo, ten years later, put an end to all his daring plans.

No battle ever had more to do with changing the face of history than that won by the man lying dead on board the Victory as she hove to off Sheerness on Sunday, December 22, 1805. For three years Napoleon had had his plans ready for invasion.

harness, and food for one and a half million meals. Every day the men were practised in embarking and disembarking, so that the advance guard of 25,000 were able to embark in about an hour and disembark in very little more. The transports were harboured at Boulogne and for twenty miles along the French coast. All that was needed was a triumphant fleet which could master Nelson while the flotilla was crossing. "Let us be masters of the Straits for only twelve hours, and we shall be masters of the world," said Napoleon. He expected to be in London within four days of landing



THE VICTOR OF TRAFALGAR GOES HOME ON THE VICTORY

There was a camp of his picked soldiers at Boulogne, 160,000 men of all arms, the finest army of that size ever assembled, the same army which was destined to win the battles of Austerlitz, Jena, and other of Napoleon's most famous triumphs.

To get this army and himself across the Channel he built some 2000 boats, each capable of carrying a hundred men, and armed with one or two cannon. Packed into these boats were 14,000,000 cartridges, 90,000 rounds of ammunition for his 450 cannon, 32,000 reserve muskets, 11,000 spare saddles and sets of

in Kent, to disband the Government, overturn the Throne, and make England part of his empire.

Nelson and his sea-dogs alone stood between him and his ambition. He had a huge fleet, but it was scattered in various ports of France and Spain. To get it together was the problem.

The story of all the manœuvres leading up to the conflict would fill a book, but at last, on October 21, 1805, the day of battle came. Admiral Villeneuve, with the French and Spanish fleets, had 33 ships; Nelson had 27. The French ships were formed in line, crescent-shaped;

THE CHILDREN'S TREASURE HOUSE

the English attacked in two straight lines, approaching the French formation at right angles, and cutting through and breaking the line. The story of the battle is familiar to us all, with Nelson's thrilling signal, "England expects that every man will do his duty," the bravery of all the English captains and crews, the unflinching gallantry of our valiant enemies, the capture of eighteen of the enemy's ships, the flight or destruction of the rest, the annihilation of the entire sea-host which was necessary to enable Napoleon to invade us.

Nelson was struck down in the first hour of the battle by a bullet from a sharpshooter in the rigging of the French ship *Redoubtable*, whose guns the *Victory* had silenced. "They've done for me at last, Hardy," said the admiral as he fell face downwards on the deck. "My backbone is shot through." Hardy was the captain of the flagship, and Nelson's beloved comrade. As they carried him below, Nelson, in order that the men should not be discouraged by knowing he was wounded, covered his face and medals with a handkerchief.

Cheerfully and bravely he endured the agony of his wound. He knew that he was dying, but he had no fear for the issue of the battle; he knew that his plans, so long and carefully prepared, could not miscarry, that the courage and endurance of his sailors would not fail. Later in the day Hardy ran below to see him, and the two friends clasped hands. "Well, Hardy, how goes the battle?" asked the dying man. "Twelve or fourteen of the enemy's ships have struck their

colours, sir." "That is well," said Nelson, "but I bargained for twenty."

A storm was brewing, and the old seaman knew it. "You must anchor, Hardy," he said. As the time wore on Nelson felt the end approaching, and begged that prayers might be said for him, and that his body might not be thrown overboard. "Kiss me, Hardy," he said, and, murmuring, "I have done my duty; I praise God for it," he yielded up the bravest spirit that ever animated a sailor.

The battle was fought and won before evening settled down, but a terrible storm raged for three days and nights after the fighting, and smote both conquerors and conquered. Some of the prizes caught fire and were destroyed, others were wrecked, and one had to be scuttled. Only four reached England, and these were in such a battered condition that they were useless. Nelson's ship, with the others, had to be taken to Gibraltar for refitting before she could bring the conqueror home. The body was preserved in spirit, and taken to the Painted Hall at Greenwich Hospital, where it lay in state until January 8, 1806. Then it was carried in a stately procession by water to Whitehall, and on the next day was laid to rest in the crypt of St. Paul's Cathedral, in a sarcophagus which had been made at the expense of Cardinal Wolsey.

To the same resting-place, forty-six years later, came Wellington, who had completed on land the work that Nelson had begun on sea. For a year the coffin of the soldier rested upon that of the sailor.

HOW WELLINGTON CAME FROM WATERLOO

AFTER his troops had all day withstood the charges of a gallant but doomed enemy, Wellington, just as the sun was setting on the battlefield of Waterloo, gave the word for a general advance of all his forces. The French, assailed along their whole front by the British, and on their right by the Prussians, who had just come into the full fighting, found

themselves caught between two armies, and their defeat became a panic. "During the day Wellington had probably saved Napoleon's life. On the battlefield he clearly saw Napoleon within range, and an artillery officer, approaching, said, "I have a distinct view of Napoleon and his staff; I have my guns pointed on them, and am ready to fire."

HOW WELLINGTON CAME FROM WATERLOO

"No, no," said the duke very quickly. "No; I'll not allow it. It is not the business of commanders to be firing on each other."

Now that the battle was over, he saved Napoleon from the savage hate of the bloodthirsty Blucher, who desired to capture and shoot the fallen emperor like a common traitor.

"You and I have played parts too distinguished in these transactions to become executioners," said the duke.

The duke had gone to the battle-

he could not retire to rest. He had still to make arrangements for his troops, for the comfort of his wounded, and much work fell upon him through the absence of the officers slain in the battle. It was eleven at night before he was at last able to dismount from his horse and go to the quarters prepared for him.

The table was laid and the evening meal spread, and those who had made ready the meal had prepared for the number of officers who usually



WELLINGTON OF WATERLOO

field with a full staff of officers and orderlies; he came back with barely one left. One by one they fell, dead or wounded, at his side. Towards the close of the battle he himself moved forward with his troops, but at nine o'clock, having met Blucher, with whom he exchanged joyful greetings and embraces, he handed on to the Prussians the task of pursuing the French and preventing them from re-forming their ranks. Although he had been all day in the saddle,

sat with their commander. But more than half the seats were vacant.

The conqueror ate little. He sat with eyes fixed upon the door of the room, hoping to see it open to admit some of the brave fellows whom, his aching heart told him, he would never see again. But they did not come, and the man who had just won one of the most important victories in all military history wept as he heard the names of the dead called out. Conqueror and conquered were both

in tears that night. Napoleon, fleeing from the stricken field, was stirred to agonies of regret and anguish by his defeat and the tragic evidences of it all around him; Wellington wept for the awful cost at which his stupendous victory had been bought.

When his brief meal was ended, the duke, reflecting upon the lives ended that day, thought, too, upon his own marvellous escapes. He had been in the thickest of the fight. He had had men killed at his side; a bullet had struck a tree within a few inches of his head. He had three times been surrounded by charging French cavalry, and had narrowly escaped capture. Yet he had lived to direct the battle to its victorious close, and had come out scatheless. And, thinking of the marvel of it all, he lifted up his hands in an attitude of prayer, and said:

"Truly the hand of God has been over me today!"

Then he retired to an inner room to write his despatch, which was charged with sadness. Men afterwards called him the Iron Duke, and thought he had no feeling; but in the middle of the night he was called to hear that his friend General Sir William Gordon, who had been wounded, was in extreme danger. It was not yet three in the morning, yet this war-worn leader, who had just

fought for the destiny of a continent, rose hastily from his bed, dressed, and hurried to his couch of his friend. When he arrived Gordon was dead, and the Iron Duke burst into tears. But there was work to be done; he had to appoint a new staff, and then and there, while Napoleon was still flying through the night, Wellington rode on to Brussels to appoint new officers and to witness the departure of his army to deliver Paris finally from the man who was pillaging her of her manhood.

That is how Wellington came back from Waterloo, his crowning victory. A lady met him in Brussels and heaped compliments upon him.

"Oh, *don't* congratulate me!" he begged her. "I have lost all my dearest friends!"

And to the Government which had sent him forth he wrote, not of glory or triumph, but these sad words:

"Nothing but a battle lost can be half so melancholy as a battle won!"

That was the spirit in which he came from Waterloo, a sad and humble spirit, and it lasted always with him. For years afterwards, when a lady greeted him with praise of the great victory, he could still only sorrowfully say:

"Madam, there is nothing so dreadful as a great victory—except a great defeat!"

HOW NAPOLEON CAME FROM WATERLOO

ONCE more, after the silence of a century, the thunder of the guns pealed across the historic field of Waterloo during the time of the Great War.

But there was no Napoleon there. That terrible human figure, whose insane ambition is said to have cost in all the sacrifice of eight million lives, had been absolute master of Europe.

He had conquered Italy, Prussia, Austria, Spain, and penetrated to the ancient capital of Russia. He had set up his brothers as kings, had made himself Emperor of France and King of Italy, had cut up and parcelled out kingdoms and empires as

he pleased, and had declared that every king in Europe should be compelled to have a palace in Paris and acknowledge the supremacy of France. But the march into Russia, followed by a terrible return in winter, cost him the bulk of his army of 600,000 men, and a European alliance against him drove him from the throne. He retired and went to the little island of Elba, but he landed in France in the spring of 1815, and was joined by the army. On June 18 he met Wellington's army at Waterloo.

The battle—between about 67,000 on Wellington's side and 74,000 under Napoleon—began at half-past eleven in the morning and lasted until after

HOW NAPOLEON CAME FROM WATERLOO

eight o'clock at night. It was one of the fiercest fights ever fought, but the enemy could make no impression on the squares of British infantry.

Napoleon, when he saw Wellington's army in the morning, said with joy, "I've got him," but as he watched the battle through his telescope, and saw his foemen still doggedly holding their ground, he became anxious for the first time. He took frequent pinches of snuff and said at last, "Will those English never

and with heavy slaughter sent them headlong into flight and ruin. The battle of Waterloo was won, and Napoleon was beaten. It was the first time Napoleon had met a British army, and it was the last.

Darkness set in, and through the appalling night Napoleon himself had to flee with the remnants of his shattered army. "I ought to have died at Waterloo," he used to say afterwards. It was Marshal Soult who forced him away. He left the car-



NAPOLEON AT WATERLOO

show us their backs?" "I fear they will be cut to pieces first," said Marshal Soult, one of his trusted generals.

He was right. Wellington's men did not fail him through all that terrible day, and when Napoleon's army, for eight and a half hours, had sought in vain to crush them, and had reeled back with horrible slaughter and confusion, Wellington at last gave the order for a general advance upon the French. With a roar of cheers the British rushed upon their enemies,

riage in which he had driven to the field of battle and mounted his horse, leaving everything, even his riding-cloak, behind him. And through the night he rode, a hunted fugitive, with wounded, panic-stricken men staggering and dying in his path, with struggling horses and broken waggons everywhere. Seven times he tried to rally his terrified mobs of men, but the Prussians came on relentlessly, slaughtering and maiming without pity. At Genappe, and again at

Quatre Bras, he sought to make a stand, but each time cries of "The Prussians!" and "Save himself who can!" drove the fugitives on afresh. Through the long night the dismal flight lasted, and as the pale light of dawn revealed to him the hapless condition of those about him, and showed him also the unburied dead lying where they had fallen in the battle of Quatre Bras, tears ran down the cheeks of the fallen conqueror.

At seven o'clock he entered the little town of Charleroi, which again suffered terribly during the Great War, and here, in a field beside the River Sambre, he sought to rally a small body of cavalry. It was in vain. As they entered the ranks on one side the men departed by the other. Famished with hunger, he ate a hurried meal brought to him by servants, and begged for a drink. He was exhausted, and must continue his flight by carriage, he said. "Sire," he was answered, "the road is encumbered with vehicles, and in a carriage you will not be able to escape the light horse of the enemy, which at every moment we expect to appear." So, though almost unable to sit in the saddle, he remounted, and started for Avesnes, but, being told that enemies lay that way, he set out for Philippeville. On this road his own men sought to obstruct his passage, but he pressed on with a few officers, and reached Philippeville almost alone.

Here, without resting, he despatched some letters calling for troops, then he got a carriage and drove to Rocroy, where the little party had a scanty supper for *300 francs* before going on to Rheims, where they arrived unnoted and unknown. From Rheims they scurried to Berry-aubac and had breakfast, when the officers with him urged that the only course for Napoleon to follow was to go, as soon as they reached Paris, booted and travel-stained, to the Parliament, give an account of the disaster, raise a new army, return at its head to Belgium, collect such of his scattered troops as he could, and then, fortified by the presence of his army,

either fight again or propose to lay aside his crown with dignity, if that should be made a condition of peace.

He reached Paris at ten o'clock at night, and Napoleon, who was to have made all kings his subjects, crept in a borrowed carriage to his palace, took a bath, declared himself refreshed, and sent for his Ministers. His spirit was crushed at last. He walked nervously to and fro in his room, saying, with a hysterical laugh, "My God! My God!" He would resign the crown and go to America, he said. Most of his old friends deserted him, and those who had been wont to tremble before him sent desperate messages urging him, the fallen lord of all Europe, to leave France at once, and so save the country from attack. At last he took refuge in his house at Malmaison, ten miles from Paris, and, fearing capture by British or Prussians, who were known to be advancing on Paris, he acted as if the few men with him were an army, burning a bridge leading to the house, and having little parties of men out as scouts.

At last, having abandoned his plan of going to America, he wrote this letter to the Prince Regent of England:

Exposed to the factions which distract my country and the enmity of the greatest Powers of Europe, I have closed my political career, and I come, like Themistocles, to throw myself on the hospitality of the British people. I put myself under the protection of their laws, which I claim from your Royal Highness, as the most powerful, the most constant, and the most generous of my enemies.

It was an extraordinary proposal, which meant that England should receive Napoleon, not as a captive, but *as a guest*; but Napoleon was disappointed. He was not a man to be trusted, even if England wanted as her guest the public enemy of Europe and the disturber of the world's peace. She made him a prisoner instead.

On July 15 Napoleon went on board the British warship *Bellerophon*, to be sent to St. Helena a captive, there to pass the rest of his days, and there to die.

MAD SAILOR MAN

Once upon a time a white man climbed a tree in Panama, and saw two oceans—the two seas which have mingled waters through an iron gate. The white man could not have dreamed of the Panama Canal, but he saw a nobler vision still, the dawn of England great at sea. This is the story of how he came down the tree and began the British Empire.

WE who read of his deeds do not call Sir Francis Drake a mad sailor. That was only the playful name that his wife gave him when, in his own little ship, he did not hesitate to encounter a whole fleet of Spain.

At the beginning we have to fix one or two thoughts concerning Drake in our minds. He was, until the time of Nelson, not only the greatest sailor England had produced, but the greatest admiral. He loved God, and sought faithfully to serve Him, yet such a man, doing his work in his way today, would be driven off the seas as a pirate. Can we honour a pirate? Can we believe that this man to whom we put up statues was a sea-thief and a robber? There is no disguising the fact that Sir Francis Drake was a pirate, the boldest and most successful pirate that ever lived. But, having said that, let us do him justice.

All the great sailors of his age were pirates. The Spaniards against whom he fought were pirates; the men who gallantly joined his ships were pirates. They were all pirates together. Drake did not consider himself a pirate, neither did Queen Elizabeth. He looked upon himself as one appointed to defend the Protestant faith against the tyranny of the merciless Spaniards, who were seeking with fire and sword to thrust their religion upon the rest of the world. They tried for years to kill the Princess Elizabeth, so that Mary Queen of Scots might reign in her stead and promote the Catholic faith. They secretly worked up rebellions in England, and when these schemes failed Philip of Spain built his terrible Armada, intending to invade England, to make her a colony of Spain, and, by burning and torture, force her people to accept the religion of Rome. Drake's was the figure towering across

the path of the King of Spain. When he saw a Spanish ship he sank it or brought it in triumph to England, or at least he emptied it of its treasures. He did not want wealth for himself. He loved his country better than his life, and he felt that every blow at Spain was a blow struck for little England. It was largely due to his personal efforts and to the wealth he brought home that England was able to build her little navy and once for all to crush the navy of Spain. Drake had a great part in founding the greatness of England. She could not be great so long as Spain ruled the waves, and that for a reason the school history books do not all tell us.

Columbus discovered America in his voyage of 1492, while Da Gama found the sea-way to India in 1498. The Pope then divided the Western and the Eastern World between Spain and Portugal. He gave Spain all the new lands west of a certain point, and Portugal all the new lands east of the same point. And Spain would not allow English ships upon the seas in the newly discovered ways. They were "pirates" if they appeared in the Pacific or Indian Oceans; they were villains to be murdered openly or by stealth if they showed themselves off the coasts of America! The American continent has over sixteen million square miles of land, and the Pope, who had no more right to it than the natives of America had to the continent of Europe, gave it all to Spain. The Spaniards, who did not seek to colonise, but only enslaved the natives and wrung gold and silver and gems from them, declared that for any other nation to approach their vast possessions was a crime punishable with death. When Philip of Spain seized Portugal, he claimed her new territories too, and so sought to bar the way of England, both east and west. These were the conditions into which Francis Drake was born; we shall see how he changed them as he passed on his way through the world.

THE CHILDREN'S TREASURE HOUSE

He was born near Tavistock, in Devonshire, somewhere between 1539 and 1545; we do not know which year exactly. When he was a boy, England was under the cruel sway of Queen Mary, who, four years before her death, married the terrible Philip of Spain, so that he came to live for a time in England. Such things are impossible now, but they happened then. Drake's father was forced by persecution to quit his home and flee into Kent, where he is believed to have become a naval chaplain, and to have preached to our sailors on their ships in the Thames. Young Francis was taken in hand by his relative, Sir John Hawkins, a bold seaman who must have given him a good schooling, for Drake proved a capital scholar, wrote admirable letters, and was a gallant gentleman as well as a fearless mariner. Yet he could have had little time for learning, for we find him apprenticed at an early age to the owner of a ship. The personal charm and good conduct of the boy so engaged the affections of his master that the master, when he died, left the little ship to Drake, so that Francis was shipowner and captain, too, while still but a youth.

THE DAYS BEFORE ENGLAND HAD BECOME GREAT AT SEA

In his tiny vessel he made many voyages along the coast, and then reached boldly out to sea, where he learned of the threats of the Spaniards to treat the English as robbers if they caught them in parts frequented by the ships of Philip.

At this time England was very much afraid of Spain. Mary was dead, and Elizabeth, who had ascended the throne when only twenty-five, had not yet felt her power. The Pope had informed her that she had no right to the throne, that it belonged to him to give away, and that it must be given to a Catholic, meaning either Mary Queen of Scots or Philip of Spain. As there were many Catholics in England, Elizabeth, who was a Protestant, had to act with great caution. She feared most of all to give offence to the all-powerful Spain. Spaniards might attack English ships and drive them from the sea, although the two countries were at peace, but England must not return blow for blow, as that would cause open war, for which England was not prepared. She had practically no navy, and no army at all; she was a little island protected only by the sea.

Now, Drake was not the man to be stopped by Spanish threats, and when, in 1567, Sir John Hawkins fitted out a

fleet for the Spanish Main, as the shores of the Caribbean Sea were called, Francis sailed with him in his tiny 50-ton Judith. When crossing the gulf of Mexico the English ships were overtaken by a storm, and had to seek refuge in the harbour of Vera Cruz, where lay twelve Spanish ships with treasure worth a million pounds. Next day twelve more Spanish ships appeared off the entrance to the harbour, but, not liking the looks of the English craft, dared not enter.

HOW DRAKE'S LITTLE SHIP FOUGHT HER WAY OUT LIKE A TIGRESS

Now, Hawkins was quite ready to fight, but he remembered the command of Queen Elizabeth, "No war, my lords," and, instead of fighting, he went to the Spanish admiral and entered into a written agreement of peace. With that the Spanish ships entered the harbour, took on board a thousand men, and at once attacked the English ships. We must not unduly blame them; their religious creed in those days taught them that treachery to those of another faith was praiseworthy. With twenty-four Spanish ships against five English ones, the English suffered badly. Only two escaped, and one was Drake's little Judith, which fought her way out like a tigress, and had a big share in sinking two Spanish vessels and burning another. Drake got safely home, and complained to Lord Burghley, Queen Elizabeth's famous Chancellor, of the treachery of the Spaniards; and it was in this way that he gained an introduction to the queen. Drake's fame began to be sounded about when the sailors from the two surviving ships landed, for he had fought with great valour in the battle, and had shown splendid seamanship in handling his vessel. The queen gave him a licence to go forth upon the sea and, at his own cost, in his own ship, seek revenge against Spain.

THE POWER THAT QUEEN ELIZABETH GAVE TO DRAKE

Drake was still young, but he had a very wise head on his shoulders. He did not plunge at once for gain and glory, but he made two journeys of discovery to what we now know as the Isthmus of Panama, the narrow neck of land uniting North America and South America, through which the Panama Canal has been pierced. Having gained all the information he needed, he set out from Plymouth, on May 24, 1572, with two ships and seventy-three men, to sail over 4000 miles, and brave the perils of the seas and the ships of Spain. He reached the Gulf of Darien, where he was

FRANCIS DRAKE SENDS OUT HIS FRIEND TO DIE



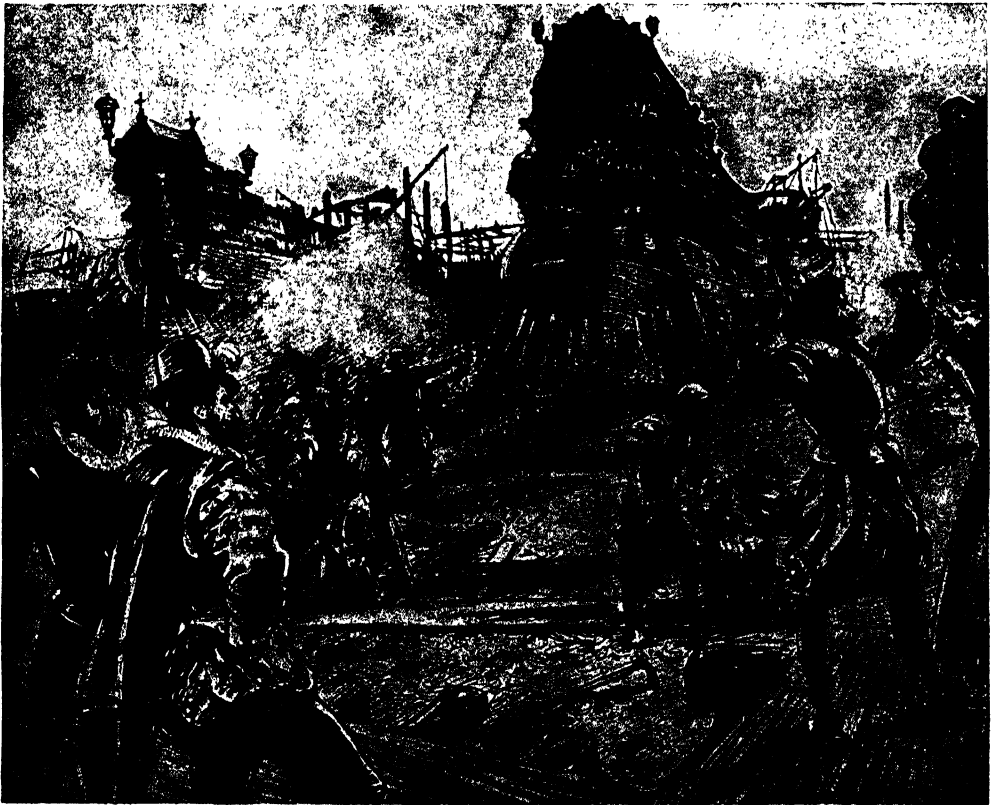
THE MOST PATHETIC SCENE IN THE LIFE OF DRAKE—THE FAREWELL TO SIR THOMAS DOUGHTY

THE CHILDREN'S TREASURE HOUSE

joined by another little English ship. There were thirty men in this, and Drake, sailing to the coast off a place named Nombre de Dios, near the site of the present-day city of Colon, left his own two ships in charge of the thirty men. He and his crew then set out in boats which they had brought with them in pieces and put together on board. They found two Spanish ships near the shore, manned by poor Indians whom the Spaniards had enslaved. Drake released them and treated them with kindness, and landed off Nombre de Dios at three o'clock in the morning.

enormous stacks of solid bars of silver—a million pounds worth of it. There was too much to take; their little boats could not have carried it, so Drake ordered his prisoners to lead him to the treasure-house where the gems were stored.

They took him there, but again the treasure—gold and pearls and jewels—was more than the boats could carry. There was the treasure, and there were the men who had hazarded their lives to snatch it from the enemy, but at the last moment they hung back. Might not the Spaniards return upon them suddenly with increased



THE BUILDING OF A GREAT SHIP IN THE DAYS OF DRAKE

Nombre de Dios was a Spanish colonial town to which gold and silver from Mexico and Peru were brought to be shipped to Spain. It was upon the money derived from the labour of slaves in these mines that Spain depended for her ships and soldiers. Drake marched upon the town, where the Spanish soldiers turned out and fought the invaders. The garrison was speedily put to flight, but Drake was severely wounded in the thigh. Two Spaniards were captured, and made to reveal the hiding-place of the silver. Here the English found

numbers and overwhelm them? Drake was furious that his men should fear the Spaniards. "I have brought you," he said, "to the mouth of the Treasure of the World. If you do not take it, but should hereafter want it, henceforward blame none but yourselves. Break open the door!" But even as he spoke he sank fainting, through the loss of blood from his wound, and his men, thoroughly frightened now, instead of seizing the treasure, took up their commander and bore him to the boats, pushed off to the ships, and never

MAD SAILOR MAN

again saw the Treasure of the World. But other booty was awaiting them, and something greater than booty. They hid their ships in a quiet bay while Drake recovered, and the Spaniards, thinking the English had gone home, returned home.

Drake now led his men upon a dazzling series of adventures. They sailed into the harbour of Cartagena, and captured a rich ship under the very noses of their astonished enemies. Next they burnt their smaller ship in order that they might be free from the care of her, and so land as many men as possible, and then, with this small force, they did a thing such as has never been done before. They braved the might of Spain on land, sacked the city of Porto Bello, and set out to waylay some of the rich caravans of treasure which were travelling from the mines of Mexico and Peru to the port to be shipped. It was only a narrow neck of land that they had to cross, but they needed guides, and they found them among the Indians whose comrades Drake had released from slavery.

Our hero was to be well rewarded now, for one of these poor Indian guides gave him one of the greatest inspirations of his life. He had taken a great liking to Drake, and, telling him he would show him two seas at once, led him to a tree and bade him climb. HOW DRAKE SAW TWO OCEANS AT ONCE AND PRAYED THAT HE MIGHT SAIL THE PACIFIC

Let us remember that Drake had sailed out across the Atlantic to reach what we now call Panama, and knew nothing of what lay on the other side of the land. It had taken Spain from 1492, the year Columbus discovered America, until 1513 to learn that there was another sea beyond, and when Drake climbed the tree a dazzling vision met his eyes, one of the most thrilling sights a man can look upon. There, on the one hand, lay the Atlantic Ocean, from which he had come; on the other lay the mighty Pacific Ocean, which, so far as is known, no Englishman but himself had ever beheld. Here were two seas with but a narrow path of land between, and as the enthralling vision met his eyes a great wave of romantic enthusiasm forced our hero to pray "that Almighty God, of His goodness, would give him life and leave to sail once in that sea *in an English ship*." Not simply that he, Francis Drake, might be the man, but that he might sail in that sea *for England*.

Before they left the isthmus they fell in with a Spanish caravan and nearly thirty tons of silver, and they bore away all they could and hid the remainder. But before

they could get back to fetch the balance the Spaniards had returned and carried it off, and when they returned to seek their ship that also had disappeared. The ship was out at sea, the little boats had disappeared, and Drake with three of his men, conquerors of cities and warships, were left to float out to sea, like the first of all sailors, on a raft of tree-trunks. After many perils they found the boats and regained the ship. THE SLENDER CHANCE UPON WHICH THE FATE OF ENGLAND HUNG

But upon what a chance hung the precious lives of these men! How utterly different the history of England and of Europe might have been had that little raft capsized in the waves! It did not capsize; they sailed home with all their treasure, reaching Plymouth fifteen months after her departure. News of Drake's return was soon ringing through the port, and one who was present wrote that the people all ran out of church, leaving the preacher alone, while they hastened "to see the evidence of God's love and blessing towards our queen and country."

The queen soon heard of the bold man's doings, and, although she dared not openly encourage him, she delighted to hear from his own lips of the manner in which he had striven to cripple the power of Spain, which was being so wickedly used against other nations. It is believed that the queen kept Drake out of sight for two years by employing him in Ireland, but, at any rate, he there and then began to plan another voyage, and the queen consented. Sir Philip Sidney, one of the finest of Englishmen, firmly believed that Drake was doing a righteous work in attacking the Spaniards, and intended to accompany him on his new voyage, but was prevented by his duties at court. Drake took with him five ships. The biggest was his own, the Pelican, a vessel which would be considered small for river work today. With it were four smaller ships. HOW DRAKE SET OUT IN SECRET TO SAIL AROUND THE WORLD

The men manning his ships did not know where they were bound for, or they might have feared to go. They believed in magic, witches, and demons. Every storm, every thunderclap, every flash of lightning seemed to them the work of evil spirits, and they firmly believed that parts of the world were inhabited entirely by demons. They thought they were going for a treasure-hunting trip into the Mediterranean, and they little dreamed that they were going round the world! In the history of the world only one ship's crew had ever before

THE CHILDREN'S TREASURE HOUSE

made such a journey, and that was the crew of Ferdinand Magellan, who, when their leader was slain, went on and completed the trip Magellan designed. It is unlikely that the English sailors had even heard of Magellan's voyage, or that they believed it possible. They did not know that the earth is round. Men thought in those days that the earth was really two flat planes, with water between. And when, in after years, people talked of Drake's voyage, they would sometimes say he had "shot the gulf," meaning that he had by some marvellous means caused his ship to leap from one side of the world to the other.

THE TREACHERY ON THE LITTLE COCKLE-SHELL SHIP SAILING DOWN THE ATLANTIC

There is an old painting of Drake in which he is shown with a pistol in his hand, and an aged caretaker, whose duty it was to show visitors round, would point to the picture and say, not having the least idea of the meaning of his words, "That is the pistol with which Drake shot the gulf!"

It was on December 13, 1577, that this memorable secret voyage round the world was begun. The little cockleshell ships went proudly out into the Atlantic, down past the coasts of Spain and Portugal, away by the west coast of Africa, until they reached Cape Verde Islands. There Drake told his men that he meant to make for the great South American country of Brazil, and on the way there a man named Thomas Doughty tried to stir up a mutiny against his leader, to murder him, or to put him away on a lonely island and leave him there, or to depose him from his command, so that Doughty himself could succeed to it. When the ships reached St. Julian's, on the Patagonian coast, Drake caused Doughty to be tried by a jury of forty picked seamen—just a quarter of the entire men of the fleet. He was given a fair trial, found guilty, and sentenced to death.

THE CAPTAIN BIDS FAREWELL TO THE MAN WHO GOES OUT TO DIE

Drake's kind heart yearned to save his enemy, and he sought every means to enable him to escape the penalty; but Doughty was brave in his last hours. He did not seek to avoid the just penalty of his crime, but when he was sentenced he begged his captain's forgiveness, and asked that he might dine with him. Together the two men received the Sacrament, then they sat down to a banquet, "each cheering up the other and taking their leave by drinking to each other, as if some pleasant journey were at hand." Then Doughty rose from

the table to die, and, "naming Drake his good captain and bidding him farewell, laid his head upon the block." The incident is one of the saddest in Drake's career.

After this tragedy the little ships, now reduced to three, set sail down the east coast of South America, and entered the dreaded Straits of Magellan. They were heading for the Pacific, they were making for the other side of America. It was a terrible passage, with twisting winds buffeting the ships, with icy mountains towering above them, and fathomless depths of water rolling beneath them. But Drake led the way. Rowing along in a little boat, he found the course for the ship to follow. Every inch of this great journey was over unknown sea, without maps or charts. At last, however, the dreaded straits were cleared, and the Pacific Ocean was lapping the keels of the baby ships of our brave captain. *They were sailing the ocean which Drake had seen from his tree-top!*

THE GREAT STORM WHICH DROVE THE LITTLE SHIP OUT TO THE OPEN SEA

But now a great storm swept down upon them, and for fifty-two days this little band of men was driven away to the south, down into the open sea. There was no more land south. Here was a discovery. Men had thought that the coast of South America stretched away "for ever," to join a sticky morass peopled by demons, yet here was open sea! One of Drake's three ships sank in this storm, the second lost touch with Drake and made her way back to England, and now Drake's ship alone was left. She had set out as the Pelican, but now Drake, as a compliment to his good friend Sir Christopher Hatton, called her the Golden Hind, that being the armorial crest of Hatton. The sailors regarded the storm as the work of fiends, but Drake simply trusted in God, and believed it was a sign from God that something notable would be accomplished. When, at last, the tempest abated, Drake turned about, sailed back to the mouth of the strait, and swept along by the coast of Chili and Peru.

We cannot imagine today with what horror and indignation his coming was received by the Spaniards. They had thought that nobody would ever dare to follow them through the dangerous and mysterious Magellan Strait. They were at the very pinnacle of their wealth and power, but the hour which saw Drake burst into the Pacific marked for them, and for their tyranny, the beginning of the end. Drake soon had evidence of the fear and

DRAKE DINES ON THE GOLDEN HIND



HE DINED IN A CABIN FRAGRANT WITH PERFUMES FROM THE QUEEN, ON A TABLE HEAPED UP WITH SILVER, TO THE SOUND OF VIOLINS

THE CHILDREN'S TREASURE HOUSE

hate the Spaniards had inspired among the people, for on landing twelve men at the Island of Mocha he had the mortification of seeing the natives mistake his crew for Spaniards, and set upon them. Drake, who had to act as surgeon as well as leader, cured the wounded men, and then found his way to Valparaiso, where he captured a rich prize. With his handful of men, he seized ship after ship in these hostile waters, and stormed Spanish towns. At last he got

prime of life, and as well trained for war as if they were old soldiers of Italy. Drake treats them with affection, and they treat him with respect. He has with him nine or ten gentlemen, younger sons of the leading men in England, who form his council; he calls them together on every occasion, and hears what they have to say, but he is not bound by their advice, though he may be guided by it. He has no privacy; those of whom I speak all dine at his table. The



THE GREAT QUEEN'S GREAT SAILOR—QUEEN ELIZABETH KNIGHTING FRANCIS DRAKE

news of a Spanish ship whose name, in English, meant Spitfire. They tracked her down and took from her 26 tons of silver, 80 pounds' weight of gold, 13 chests of money, and a great quantity of jewels and precious stones, a prize worth about £200,000 in Elizabethan money, but a great deal more today.

Drake treated his prisoners with the greatest kindness, and from one of them, a rich Spanish nobleman, we have a letter describing the man, his ship, and his crew. "The English general," he wrote, "is the same who took Nombre de Dios some five years ago. He is about thirty-five years of age, of small size, with a reddish beard, and is one of the greatest sailors that exist, both from his skill and from his power of commanding. Each one of the crew is in the

service is of silver, richly gilt, and engraved with his arms; he has, too, every possible luxury, even to perfumes, many of which, he told me, were given him by the queen. None of these gentlemen sits down or puts on his hat in his presence without repeated permission. He dines and sups to the music of violins. His ship carries thirty large guns, and a great quantity of all sorts of ammunition, as well as artificers who can execute necessary repairs. He has two artists, who portray the whole coast in its own colours, which troubled me much to see, because everything is put so naturally that anyone following him will have no difficulty." Drake was going round the world unguided, but he was bringing home maps and charts so that it would

SIR FRANCIS DRAKE MAKES UP HIS MIND



A RED INDIAN LED DRAKE TO A TREE IN PANAMA FROM WHICH HE COULD SEE BOTH THE ATLANTIC AND PACIFIC OCEANS, AND THERE, IN SIGHT OF THE HIGHWAY, TO AN UNKNOWN WORLD, DRAKE PRAYED THAT GOD MIGHT SEND HIM TO SAIL THAT SEA IN AN ENGLISH SHIP

THE CHILDREN'S TREASURE HOUSE

never be necessary for another sailor to go without maps out into the great waters.

By this time the little Golden Hind was filled with treasure, and the question was, Which way should they go home? Should they try for that simple way round the north of America of which there had been talk? They had only to go far enough north, it was thought, to find open water to sail through, just as by going far enough south they had found open water round the southern foot of the continent. Without hesitation Drake set out to find the North-East Passage, which, in later ages, was to cost so many precious lives to win. He got as far up the coast as Vancouver, but then the hearts of his men failed him. They

precious spices from the Indies, they rounded the Cape of Good Hope, sailed up the western coast of Africa, and so reached home on September 26, 1580, with a treasure estimated at seven and a half million dollars in the money of that period, which would be six or seven times as much in ours.

And now there was an awkward situation for the queen to face. If she showed the pleasure she felt at Drake's success, she would give offence to Spain, and bring on war. Should she, then, welcome him as a national benefactor, as one who had struck hard at the wealth and shipping of a nation which was secretly at war with her, though openly at peace? Or should she put him in prison as a pirate?



"THERE IS TIME TO WIN THE GAME AND BEAT THE SPANIARDS TOO," SAID DRAKE, WHEN THE SPANISH ARMADA WAS SIGHTED OFF CORNWALL. AND DRAKE WAS AS GOOD AS HIS WORD

were getting near the homes of the ice demons, they thought, so, to appease them, he turned and sailed out to the west, and then his men knew for the first time that they really must go round the world to reach home. We cannot follow the homeward voyage in detail, but we can trace it on the map. They sailed from the western coast of America, and for sixty-eight days ploughed their way across the Pacific without once sighting land. Various islands were touched farther on in the Pacific, and then they reached the East Indies. They had now done what Columbus had set out to do—they had reached the Indies in the east by sailing on and on to the west, but to do so they had had to sail two or three times as far as Columbus had thought would be necessary. They took home

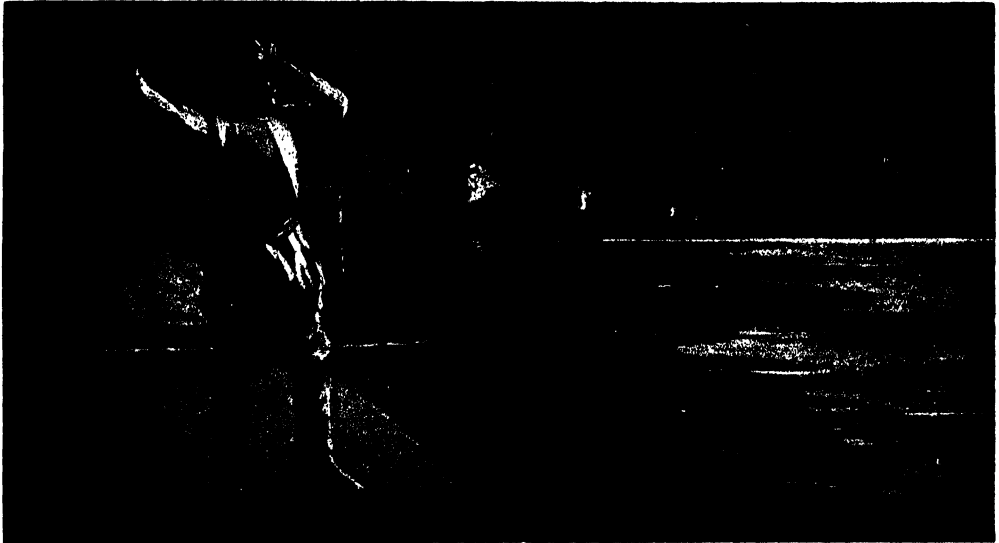
Well, the Spanish Ambassador demanded the return of the treasure and the punishment of Drake, and Elizabeth at last gave him a reply which marked a new starting-point in the history of the British nation. She defended Drake on several grounds. If he had taken Spanish treasure, she said, he had taken no more than it had cost her to put down the rebellions which Spain had worked up in England and Ireland, and he had but treated the Spaniards as he himself had been treated. But the important point was this: She denied the right of the Spaniards to prohibit commerce; she denied the right of Spain to take the whole of America, known and unknown, as the gift of the Pope; she denied either the right or the power of Spain to prevent the people of other nations from trading or

MAD SAILOR MAN

colonising in parts where Spain had not already settled, or from freely navigating the vast ocean, adding, "The use of the sea and air is common to all, and neither nature, nor public use, nor custom permit any possession thereof."

In that reply began the British Empire. England was to be free to trade where she would, and to colonise where she might. Francis Drake had shown her that she could do it, in spite of all the ships and men and money of Spain. Seven months after its return, the *Golden Hind* was taken up the Thames to Deptford, and the queen went on board and knighted Drake as the first man of any nation who had commanded a voyage round the world. People almost worshipped Drake and his gallant little ship.

treasure-ships coming home from America, to capture Spanish-American towns and exact ransom, and generally to weaken and terrify the Spaniards. When at last the great "Invincible Armada," with 129 vessels of war—65 of them the biggest vessels then in existence—set sail with 8000 sailors and over 2000 cannon, with 19,000 soldiers on board and 40,000 more ready—when this great host set sail, Sir Francis Drake was ready. News of the Armada's coming up the Channel was carried to Plymouth, where Drake and Howard were playing bowls upon the Hoe. Lord Howard wished to put to sea at once, but Drake went on with his bowling, and lightly answered, "There's plenty of time to win this game and to thrash



"ENGLAND IS WATCHING"—BEACON FIRES ROUND THE COAST AT THE COMING OF THE ARMADA

They thought so much of the vessel that they proposed to hoist it up bodily to the top of the spire of St. Paul's Cathedral!

Drake's life afterwards becomes more and more a leading chapter in the history of England. He knew that Spain was preparing her Armada, with the intention of invading England, and again and again he begged the queen to let him attack the Spaniards in their own harbours and in their own possessions. It was safer, he urged, to fight them there than to wait for them to come to England and risk the issue of battle close to her own shores. He himself poured money into the treasury to strengthen our Navy, and from time to time sailed forth to smash up shipping and stores in Spanish ports, to cut off rich

the Spaniards too." And so there was. When Drake's war-drum sounded on his ship, there was not a man in his fleet who did not feel that we were going to beat the Spaniards. How, day after day, that stupendous battle was fought and won is a great chapter in the history of the world. Drake's part in it was the most important of all, for at one point he had to fight the whole Spanish fleet. The Spaniards had forty-nine more ships than his, and more than twice as many men, but the English were such magnificent sailors and fighters, so bold and so clever, that there was never any real danger of defeat. A great storm helped England, and Drake, undaunted by the tempest, followed the Spaniards into Calais, where they had sought shelter, and

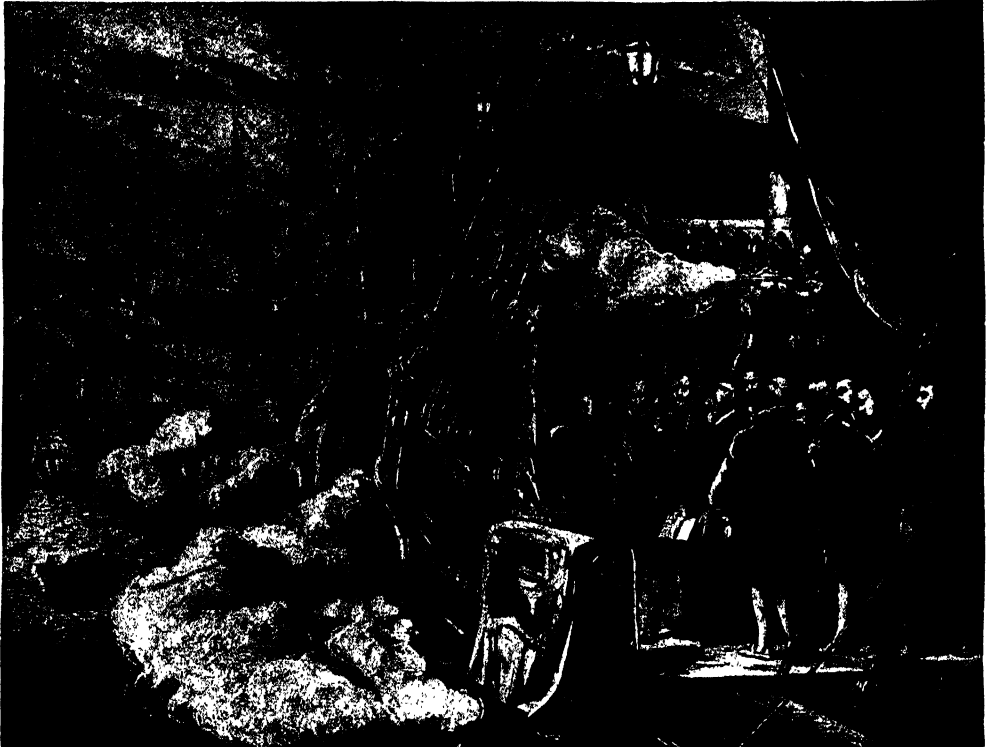
THE CHILDREN'S TREASURE HOUSE

sent fire-ships down upon their fleet, causing the Spaniards to flee in panic into the open, where the English were ready to pound them afresh. Day after day the running fight was carried on, the Spaniards losing ships and men with never a suggestion of victory in return. They fled in confusion to the north of Scotland and to the coast of Ireland.

Drake, whose gallant heart was rejoicing during this battle, which he knew was the final struggle between England and Spain, wrote gaily during the fight: "There was never anything pleased me better than

vexed and tried our hero, and he sickened and was laid prostrate. There, on board his ship, on January 28, 1596, very early in the morning, "he yielded up his spirit like a Christian to his Creator quietly in his cabin." His death dazed and overwhelmed his companions, and in sorrow they sealed his body in a coffin of lead and bore it out a league from the shore, where, "amidst a lament of trumpets and the thunder of guns, the sea received her own again."

"Drake is dead!" The news rang through an England sorrowing and a Spain



THE SAILOR'S HOME—SIR FRANCIS DRAKE IS BURIED IN THE SEA HE LOVED SO WELL

seeing the enemy flying with a southerly wind to the northward. With the grace of God, if we live, I doubt not ere long so to handle the matter with the Duke of Sidonia as he shall wish himself at St. Mary Port among his orange-trees."

After the defeat of the Armada, Drake made many other expeditions against the Spaniards, and it was during one of these that he met his death. His ships were lying off Nombre de Dios again, the scene of his first wonderful exploit. While near there his kinsman, Sir John Hawkins, died. Various worries and disappointments

rejoicing. But Drake can never die. His spirit lived and lives immortal in his countrymen. He had broken the power and tyranny of Spain, and England was free to send her ships to every sea and colonise in the Old World and the New. Drake's drum still hangs in the hall of his descendants, and the people of Devon have a tradition that if ever England should be threatened with invasion, and should be in danger, we have but to take that drum and beat it by the shore, and Drake will come back, to "Drum them up the Channel as we drummed them long ago."

CAPTAIN COOK

EXPLORER OF HALF THE WORLD

DURING the year 1779 Europe was in the throes of war, and England and France were engaged in one of the deadly struggles which were to continue, off and on, until Waterloo. Englishmen and Frenchmen killed one another at sight on sea or land. But there was one Englishman in the world whom French commanders were compelled to respect, by special orders of the French Government. His ship and his sailors, whenever and wherever they were met, were to be treated as those of a friendly ally.

And this one man was not a king or a prince, he was not a great leader of armies or navies. He was the son of a poor, half-starved agricultural labourer. He was Captain Cook. He had fought against the French, and had helped to seize a great territory from them, but his achievements for humanity in the paths of peace were such that a nation at war with us declared that he must be considered the friend of all the world. All civilised men, even in war, respected him; it was left to savages to slay this noble-hearted man.

What was it that this wonderful man achieved? He surveyed a greater length of coast-line than any other man, making it safe for ships to travel in depths previously unknown; he wiped a supposed continent off the map and put a real one there; he added three million square miles to the British Empire; he was one of the most humane men who ever lived; he alone found out the way to keep men healthy at sea, and so for ever did away with the frightful death-rolls which had always accompanied long voyages on the ocean.

James Cook was born at Marton, in Yorkshire, in the autumn of 1728, in a tiny two-roomed cottage built of mud. His father and mother were very poor, and had nine children to keep. James was taught his letters by a kindly old dame in the village, but when he was eight his father, being promoted to the position of head farm

servant to a Mr. Skottow at Airy Holme, near Great Ayton, removed there with his family. Mr. Skottow was interested in the thoughtful, broad-browed little James, and actually had the boy taught to write and do a few sums, which was a very great accomplishment for the child of a labouring man in those days. But the schooling did not last long, for when Cook was twelve he was bound apprentice to a shopkeeper at Staithes, a small fishing town ten miles from Whitby. Since those days the sea has washed the shop away.

It was soon found impossible, happily, to chain a born navigator to the counter of a stuffy little shop when the sea at the foot of the street was ever calling him, and there is no wonder the boy left the shop, and bound himself to serve under a firm of shipowners engaged in carrying coal.

So the greatest of navigators set out to sea, half sailor, half coal-heaver. He served his firm with diligence, storing in his mind all the lessons that he gained in navigation and seacraft. When he reached manhood he continued to serve as a common sailor, until his zeal was rewarded by his appointment as mate. It was as mate of a coaling ship that Cook, in the spring of 1755, sailed up the Thames with a load of coals for London.

War had just broken out between England and France, and in those bad old days the Government had the right to steal free Englishmen, drag them aboard ship, and carry them away to sea to fight and be killed without a moment's warning. It was the press gang which made the captures of men, and when Cook reached the Thames he heard that the gang was very active in its evil work. They had the right to take anybody, whether he was serving on another ship or not, so long as that ship did not belong to the Navy. Cook saw that his prospects were in danger, and that, instead of returning with his little ship to the North, he was in peril

THE CHILDREN'S TREASURE HOUSE



A youth of the Society Islands



A native of New Caledonia



The King of Tahiti

THE SORT OF PEOPLE CAPTAIN COOK MET WITH ON HIS VOYAGE OF DISCOVERY IN THE

of arrest. So he hid, determined not to be snatched away. But as he lay in hiding he thought the matter over, saw that, no matter what he did, he was still in danger of being snapped up, and decided that he would volunteer rather than be taken as a prisoner. So he came out of hiding, went boldly to the naval authorities, and became a sailor on the man-of-war *Eagle*.

He distinguished himself on board by his diligence and smartness and intelligence, and the captain soon formed a favourable opinion of him. A gentleman at Scarborough, hearing of what happened, wrote to the captain of the ship, saying what an excellent fellow Cook was, and asking that he should, if possible, be promoted. The Captain replied in terms of high praise of Cook, and managed to secure for him the post of master, the highest rank a common sailor could reach.

The war between France and England carried Cook's ship to Canada, where he fought in the battle of Louisburg, at Cape Breton, Nova Scotia, and helped to capture there the strongest fortress that France possessed in the New World. Afterwards he took part in the fighting in the St. Lawrence River which led up to the conquest of Quebec by General Wolfe, and made England mistress of Canada. Thus the boy from a mud cottage in Yorkshire helped to enthrone England on the greater half of the northern part of the New World before he set out to find for her a still newer world.

It proved a fortunate chance for Cook and England that he did enlist in the Navy, and it was fortunate again that he went to this particular part of the world, for the channel of the river needed surveying, and his captain selected him to do the work.

It was exactly the task for which Cook was fitted. He delighted to master the mystery of tide and current, of shoal and hidden rock, and he was eager to probe the thousand and one dangers lurking beneath the smiling surface of the water. Often he had to work at night in order that he might escape the guns of the enemy, which were ranged in two forts powerfully defended by the French. Cook had secretly to learn the depths so that the English admiral might know where to anchor his ships for the coming attacks.

One night the brave young Englishman was discovered by the Red Indians, who were allied with the French, and a great number of them dashed out after him in their swift canoes. Cook darted for safety on the shore of Orleans Island, in the middle of the river. As he leapt out of one end of the boat the Indians bounded in at the other end, and, missing him, carried away the boat as a trophy, though they would much rather have had the white man's scalp. Still, Cook got the information he needed, all charted, and his marvellous little maps were steadily building the way for the capture of Quebec and Canada. He next surveyed the whole course of the river below Quebec, and it was never necessary to do his work over again, so admirably were his surveys carried out and so well were his charts drawn.

Cook was rewarded with a gift of fifty pounds for his admirable work, and, seizing the first opportunity of studying ashore, he made himself master of the rudiments of Euclid and astronomy. Next, he made one or two journeys to Newfoundland, where he carried on surveying work in snatches; but, coming home for a brief

EXPLORER OF HALF THE WORLD



A man of Tierra del Fuego



A native of Easter Island



A man of Tanna in the New Hebrides

SOUTH SEAS—GREAT MEN OF THE DYING RACES WHOSE FRIENDSHIP THE EXPLORER WON

holiday, he married, and was in fear that he might have to settle down on land. Happily, he was called out to continue his survey of Newfoundland, and while there did a very characteristic thing. An eclipse of the sun occurred, and Cook, taking careful observations, sent home to the Royal Society a scientific account of his work, with the result that learned people at home realised that this obscure young seaman was a good mathematician, and an observer of the first order. Great careers often turn on trifles, and so it was with Cook.

In June, 1769, the planet Venus was due to pass across the face of the sun, and it was decided by the British Government to send out an expedition to observe the spectacle. Tahiti, one of several islands which Cook afterwards named the Society Islands, was the spot selected. Who was to go? Once before a similar expedition had been sent out, under the charge of a scientist who was not a seaman, and the results were most unfortunate. This time that rare sea-dog the stout Lord Hawke declared that he would cut off his right hand rather than consent to anyone but an officer of the king going out in command. Where was a naval officer who cared a snap for science? Well, Cook was the very man. His paper on the eclipse had made him well known, and he was selected. He was given the command of the ship *Endeavour*, and with him went Sir Joseph Banks, a man destined to be famous in science; and, all told, there were 84 people on board.

The little ship, which was to go on from Tahiti to explore the Pacific Ocean, weighed less than 400 tons, and was a midget compared with even the tiny ocean tramps of today. These have steam, but the *En-*

deavour had only sails. Yet she was away three years, and made immortal history.

The party sailed on August 25, 1768, a happy, hopeful family. On the way across the ocean they saw the sea apparently on fire at night, and we can imagine how terrible and beautiful the sight must have been to the travellers. Cook gave it as his opinion that the light came from luminous fishes and other forms of life in the sea, and of course he was right.

Touching at Rio de Janeiro, the capital of Brazil, certain members of the party had a terrible experience. Climbing a mountain in search of plants on a perfect summer's day, they were all nearly frozen to death at night. Indeed, two of the party did die upon the mountain-side from exposure to the bitter cold.

On getting out into the Pacific Ocean, Cook discovered several new islands, and named them. They were inhabited, but had never before been seen by white men. Tahiti was reached after a voyage of rather less than a year, and parties were landed to erect a small fort and a place for observation. The natives were friendly, but timid. There never was an explorer who had a more genuine affection for his fellow-creatures, no matter what their colour, than Cook. He now drew up a strict code of rules governing the dealings between his crew and the natives, and the first was "to endeavour by every fair means to cultivate a friendship with the natives, and to treat them with every imaginable humanity."

That was a fine note to strike at the beginning of his career, and he sounded it all through his life. It seems only fit and right to us that this should be the idea of an explorer, but some of the most horrible

THE CHILDREN'S TREASURE HOUSE

crimes have been committed by white men landing in new countries, and Cook was the exception of his age. His rules proved necessary, for some of his crew showed violence towards natives, and had to be publicly punished for their offence, in order that the white man's credit might not suffer. Cook would not allow a piece of timber to be taken without being paid for,

nor a tree cut down without the consent of the natives; and when he heard that one of his crew had offered violence to an Indian woman who would not sell him a stone hatchet, Cook invited the woman and her friends on board, and ordered the offender to be whipped before them. The

Indians waited breathlessly during the preparations, but as the first blow fell on the shoulders of the dishonest man they implored that he might be forgiven. Cook, however, felt that an example must be made, both to make his crew respect his orders and to make the natives realise that justice would be done. In that spirit he advanced, and in due time the purpose for

which the expedition had reached the island was achieved. Then the Endeavour set out farther south to make what discoveries she could in the wide Pacific, taking on board two natives of Tahiti who had become attached to Cook. The services of these two men were of great value, as they were able to speak the language of the people inhabiting many of the islands. Sailing on,

he reached the coast of New Zealand, which had been touched more than a century before by a brave Dutchman named Tasman, though nothing whatever was known of it.

And now we come to an extraordinary story in the progress of human knowledge. The valiant Magellan had burst

into the Pacific about 250 years before this time, but there had been no serious attempt to explore it. The ocean served as a pathway to the lands in America which Spain had conquered. All that Spain desired was to wring wealth from her possessions in the New World. Portugal followed, determined to trade, and the Dutch, then becoming a great



A NEW ZEALAND FAMILY, FROM A PICTURE DRAWN BY AN ARTIST ON CAPTAIN COOK'S SHIP



THE SORT OF SHIPS THE NATIVES HAD—THE FLEET OF TAHITI, A GROUP OF ISLANDS WHICH CAPTAIN COOK CALLED THE SOCIETY ISLANDS IN HONOUR OF THE ROYAL SOCIETY OF LONDON.

THE LAST THAT WAS SEEN OF CAPTAIN COOK



AS HE HAILED HIS BOAT A NATIVE STOLE UP BEHIND THE CAPTAIN WITH A DAGGER, AND KILLED HIM

THE CHILDREN'S TREASURE HOUSE

sea Power, followed suit. Now, it seems an almost incredible thing today, but these three Powers sought to keep the rest of the world in ignorance as to what lay in the great Pacific. Any ship but their own was regarded as that of a pirate. Discoveries of other lands were not wanted; if

people and sparkling with gems and gold and precious perfumes. They had not the least idea of the real Australasia; they thought that their imaginary continent stretched away to the South Pole, an unbroken land of warmth and sunshine and plenty, reaching right round the world at

its southernmost degree. As land is massed at the northern side of the world, surely, they thought, there must be corresponding land to balance matters at the other side of the world. And the doughty Tasman, when he touched New Zealand, thought that he had merely run up against some outpost of the great unknown land.

But there was no deceiving Cook. He sailed through the land by what is now known as Cook's Strait, the open sea-passage dividing the two great islands of New Zealand, and then he sailed completely round the two islands. This, then, was not the promised continent. He had many wonderful adventures with the Maoris, the natives of New Zealand, a wonderful people who, five or six hundred years before, had come from the Polynesian Islands in their great canoes. They were brave but cruel, and killed and ate their enemies, and many times they tried to destroy Cook



THE PERIL OF CAPTAIN COOK—WATCHING THE WATERSPOUTS THAT NEARLY OVERWHELMED HIS SHIP IN THE SOUTH SEAS

they were made, the record was locked away in secret, so that nobody else should know. All was guesswork as to what lay in that mighty southern ocean reaching away from the foot of South America. Men believed that a vast continent was there, *a continent enormously rich, teeming with*

and his party. When he could, he gained their confidence by kindness; at times he frightened them with his guns; and once he was compelled to kill several, owing to their hostility, a fact he regretted more than anything else in his whole career. Having completed his survey, Cook took

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possession of New Zealand for England. To do this, he erected two wooden posts on a high hill overlooking Queen Charlotte Sound, bearing the name of the ship, the date, and a Union Jack. Then he got together an old chief and his tribe, gave each a present, and got them to swear never to pull down the flag or the memorial.

But, as a matter of fact, England did not take possession of the islands for another seventy-one years. Indeed, she absolutely refused to have New Zealand as a colony, and it is one of the grim ironies of history that the capital of New Zealand, Wellington, should be named after the soldier who opposed the idea of making the colony a British possession.

In the end it came to a race for possession between France and England. Each country had an expedition on the way to New Zealand at the time, but the English arrived first, and when the French ship put into port she found that the Union Jack had been finally hoisted a few days before her coming. So England became mistress of Australia, and France lost Australia, by a few weeks.

Cook left the land which he had thus given to England, and steered away to what is now Australia, of which almost nothing was known. The coast had been touched at various points by mariners on the west and north, but they had seen only its barren side, and brought back tales of its hopeless character and its forbidding savages. Cook was the first man known to history to

approach its eastern coast, to see the wealth of fertile land that it contained, and to realise that here was a new continent. He coasted from the south-eastern portion up to the most northern point, landed from time to time, and learned something of the ways and customs of the people. The



CAPTAIN COOK IN HIS CABIN—DISCUSSING A MAP WITH A RUSSIAN SAILOR DURING HIS VOYAGE TO THE BEHRING STRAITS

gallant little Endeavour was, every inch of her voyage along the coasts, in unknown waters, and not a soul on board knew anything of the terrors concealed in the smiling waters. One day the ship ran aground on a hidden rock, twenty-five miles from land. Despite all endeavours to move her, she lay

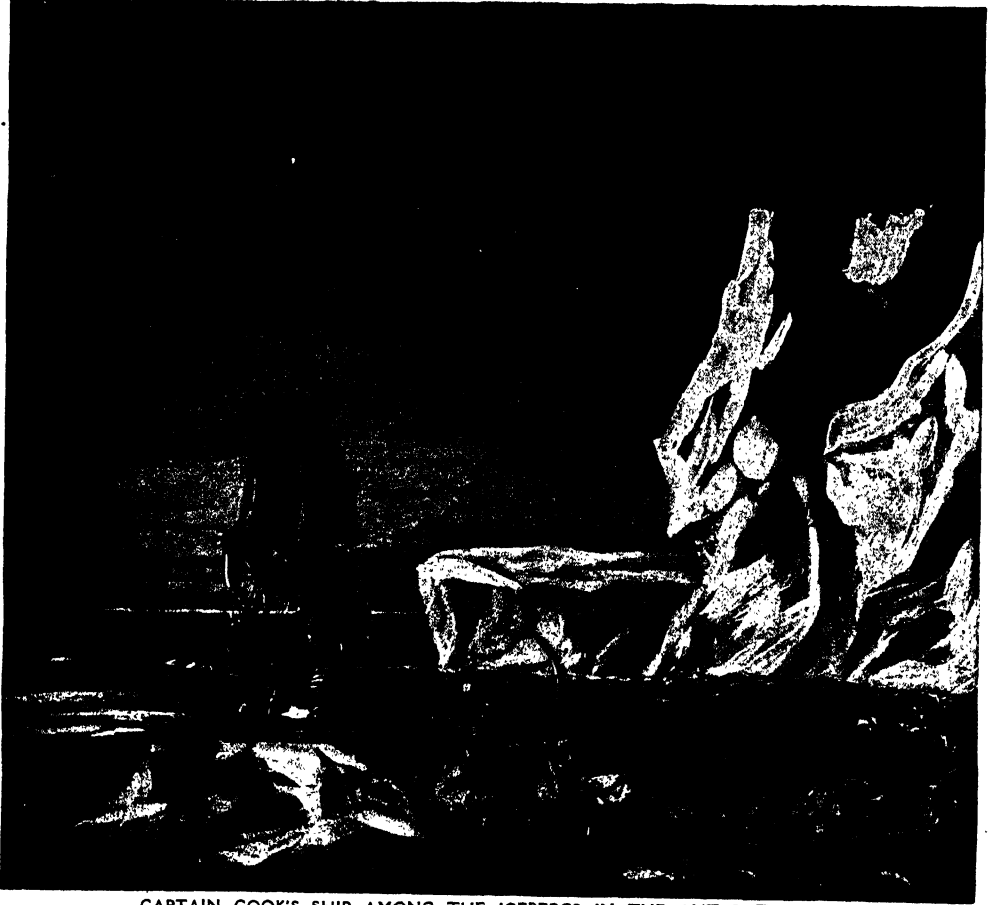
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for two days and nights poised upon the rock. At last she was got off, and as water had poured in through holes in her hull it was feared that she would sink. But, to everybody's joy, she did not. A great piece of rock had pierced her hull, and this snapped off as she moved, and remained to plug the wound that it had caused. Skilful carpenters patched up the damage, and the ship eventually reached home in safety.

Cook was by this time generally famous, and soon it was decided to send him out

the ice-cap which stretches to the South Pole. Cook was brilliantly successful, for he had at last cleared up the age-old mystery of the Southern Pacific. He had found Australia, and proved that the "missing continent" was but a fable.

It was on this voyage that Cook taught those at sea how, by wise and careful feeding and medicines, to preserve human life on board ship. It is a delightful trait in Cook's noble character that he counted this the greatest feat of his life.



CAPTAIN COOK'S SHIP AMONG THE ICEBERGS IN THE ANTARCTIC SEAS

again to look for the fabled continent which many still persisted in believing to exist. This time he took with him two ships, and sailed away due south, looking for the continent that never existed. He steered in all directions, right into the ice of the Antarctic. His crossings and recrossings covered a sufficient distance to have carried him three times round the globe. As it was, with all his windings, he did sail right round the earth at its southern extremity—round

Home again in England, he was sent forth on his third and last journey to try to find a north-west passage from the Atlantic to the Pacific, round by the north of America. In this he failed, but, driven by frightful weather back to warmer climes, he discovered many other important islands, and at last put in at Karakakoa Bay, Hawaii. The people received him with joy, thinking him a god. He and they exchanged presents, and the natives

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provided food for the ship until they grew a little tired. At last the ship started out to sea, but was driven back by bad weather. The natives misunderstood the object; they were afraid that their food supplies would be exhausted in maintaining the crew. Many quarrels occurred between sailors and natives, and the natives stole things belonging to the ship. But all would still have gone well had Cook's orders been obeyed. He himself landed with a party of men, telling his crew to draw off with the

a native rushed at him and stabbed him. The magic of the man was gone the instant he turned his eyes from the crowd, and the savages killed him with their clubs. So, on February 14, 1779, died one of the greatest of Englishmen, and one of the wisest and most daring of explorers.

He did not leave his work unfinished. He had opened the Pacific to the world, he had discovered all the land that could be found; and though it remained to others to complete the exploration of the



THE LAST MOMENT OF CAPTAIN COOK—KILLED BY NATIVES OF THE SANDWICH ISLANDS

boats, while he and a few companions marched up to the king's house. He intended to invite the king on board, and so restore confidence and friendship, as he had done before. But while he was thus engaged a man ran up to say that one of the boat's crew had killed a native. The natives then prepared to attack Cook. He repelled the attack with as little violence as possible, but was at last compelled to fire. The men in the boats were by this time firing, too, and Cook turned round to bid them cease. As he did so

Australian coasts, he had given us the key to the mystery. He laid the foundations of the British Empire in Australia, and added a fifth continent to the map of the world. Throughout the civilised globe his name is remembered as one of the noblest men the world has ever known. He was an honour to the home from which he sprang, and to the nation of which he was a citizen; he was a shining example of devotion to a great cause, the highest service of humanity, for he opened up the waste places of the earth as a habitation for mankind.

SIR JOSEPH BANKS SEES A KANGAROO



LANDING ON THE COAST OF AUSTRALIA. SIR JOSEPH BANKS WAS SUDDENLY STARTLED BY THE FIRST SIGHT OF A KANGAROO

THE COUNTRY LANE THAT LED TO AUSTRALIA

THERE is a jolly little picture coming down to us from a hundred years ago in London streets—a picture of a little native of Tahiti, brought home from his Pacific island by Captain Cook and Sir Joseph Banks.

He would roam about London by day or night, and would inevitably be lost, but he had a sure way to find himself. Whatever English he did not know, he knew enough to cry out in the streets: "Take me to Sir Joseph Banks! Take me to Sir Joseph Banks!" And the people of London, seeing this odd little figure from the other side of the world in their streets, would take him to Sir Joseph Banks, for they all knew Sir Joseph then, though the world was to forget him for so long.

He was one of the discoverers and builders of the British Empire. If he had never lived we should probably not have colonised Australia, and there would probably have been no Anzacs to fight France. And yet if he had had his way it would hardly have been worth while our having Australia, for there would probably have been no steamships to go there. Great scientist as he was, President of the Royal Society, he pooh-poohed the steamship as certain scientific men in our day pooh-poohed the aeroplane. "A pretty plan," he said, "but it overlooks one point—that an engine must have a firm base!" He did not see any way of giving an engine a foundation at sea, though we have now given engines developing 1800 horsepower a foundation in the clouds!

But we can forgive Sir Joseph Banks. He did a very great work for the world, and when he was wrong he was honestly wrong, and fought for his case in the earnest belief that he was fighting for the truth. He opposed steamships, but he brought the first indiarubber into England, and so we may think of him as preparing a way for the motor-car. He may, for a while, have

hindered travel to the Antipodes, yet Australia regards him as her father.

There is an enormous balance of good in his favour, and everybody loved him. When a broken traveller, after unjust imprisonment in Russia, was turned adrift, starving and in rags, he mentioned the name of Sir Joseph Banks, and it sufficed; he was allowed to draw as much money as he needed. When Mungo Park wished to go to Africa it was to Sir Joseph Banks that he turned. When Jamaica needed a new food supply, the people wrote to Banks, and he sent them the bread-fruit tree. When Iceland was perishing of starvation, the Danish fleet being unable to send supplies, it was the unfailing Sir Joseph who got supplies sent to them.

An extraordinary man this, known in every civilised land, honoured on sea and land, even during all those years when Napoleon kept the world on fire with war. We have had no other man quite like him. He charmed and commanded men wherever he went, and all the world looked up to him, wars or no wars, as prophet, priest, and king. And yet we may almost say that the astonishing career of this great man turned on a late evening swim and a lonely walk home through a lane bedecked with flowers.

He was born in Argyle Street, London, in February, 1743, the only son of a wealthy father, whose country home was at Revesby Abbey, in Lincolnshire. The Bankses were an old landed house, but a Derbyshire heiress came into the family and added her money to the lands, so that Joseph inherited £30,000 a year.

It was in his schooldays at Eton that there happened the incident upon which his career may be said to have turned. The boys were out bathing one evening, and Banks was left to find his way home alone. He walked slowly along a lane brilliant with flowers, and the sight of these glorious

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blossoms filled him with delight. "How beautiful!" he thought. "It is surely more natural that I should be taught to know these things rather than Latin and Greek." Latin and Greek were his father's command, but Joseph from that hour resolved to study flowers as well. We may say that British Australia was born in that lane that night.

To learn botany he would go about among old women who collected plants for chemists, and if they told him anything interesting he would give them sixpence. At home he found a tattered old book on botany, with pictures which enabled him to identify flowers. When, after a short stay at Cambridge, he settled down at Oxford, he found that the University had no lecturer on botany, and he was able to get one appointed.

The Elizabethan spirit of discovery was strong within him when he left Oxford, and he set out on a trip to Newfoundland and Labrador, where he made his first natural history collection, the first flower from the seed sown in that English lane. He had begun his task of transplanting seeds from one side of the earth to the other.

Most young men of his age, inheriting such a fortune as his, would have made the usual round of the chief cities of Europe. Banks made a grander and wider tour. Captain Cook was setting forth, in 1768, on his first great voyage, to observe the

transit of Venus, and to explore the less-known parts of the southern Pacific, and Banks had influence enough to enable him to join the expedition. His grand tour was to be around the globe. He did it all on a great scale. He took artists and draughtsmen and servants, and as his guest went Dr. Solander, a Swede whose name is still famous in natural history. If his company was princely and his equipment luxurious, Banks acquitted himself like a scientist and a

student rather than as a mere traveller. They had not crossed the Bay of Biscay before he had begun his collection of surface fishes and marine birds.

Reaching down the coast, they landed in the Bay of Good Success, in what Magellan had called the Land of Fire; and Banks and his party set out to explore. A little run into the interior and back to the ship by nightfall—nothing more, they said.

Ascending a hill, they came upon a swamp where snow was falling heavily, and one of the party was seized with a fit. A fire was kindled, and he was left with a companion while the others went on, explored, and returned. But by this time night had fallen, and it was intensely cold in this "land of fire." "Let no man halt; keep moving," said Dr. Solander, but this hardy doctor was the first to be overcome. There was the stuff of heroism in Banks, and he did wonders by his exertions and



SIR JOSEPH BANKS. From the painting by Sir Joshua Reynolds

A GREAT MAN BUYS A SLAVE TO NURSE HIM



FALLING ILL ON HIS EXPLORATIONS IN THE PACIFIC, SIR JOSEPH BANKS BOUGHT A SLAVE TO
TAKE CARE OF HIM AND NURSE HIM BACK TO HEALTH

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example. He sent one or two forward in advance, and when they returned to report that there was a fire burning a quarter of a mile away he sought to get the rest moving. But one of the negroes was dying, and Solander, having lost the use of his limbs, had to be carried.

The fire was reached, and two of the stoutest of the party were sent back to fetch the negro and the two men left with him. There was a bottle of rum in a knapsack, and all five drank of it, with the result that four of the five died from the effects of alcohol and frost. The night was passed in great danger of frost-bite, and there was no food for the next day, save a vulture they had killed. But they cut up the bird into ten portions and ate it—a nauseous but life-sustaining meal. They reached the ship at last without further incident, and in due course arrived at their goal, Tahiti, where the last of the frost-bitten party died.

Here it was that they witnessed the passage of Venus across the sun, but while at Tahiti Banks interested himself in everything. He planted melon and other seeds that he had managed to smuggle from Rio de Janeiro. He became friendly with the natives, and learned much of their customs, so much so that he attended one of their funerals, first stripping to the waist and blackening his body with charcoal. Some of the natives stole the only quadrant he had, but he went into the depths of the forest and redeemed the precious instrument.

At length, after a journey right round New Zealand, they reached Australia—quite a different Australia from that which had horrified Dampier as he approached it long before from the western side. Banks and his fellow-naturalists were delighted with the new flora which they discovered in the first bay they entered, and to celebrate their finds they named the place Botany Bay.

A few days after their arrival two strange ships were seen at the entrance of the bay. It proved to be the

expedition of La Pérouse, the great Frenchman, sent by his Government to take possession of Australia in the name of France. He was just too late; he found the British flag already flying, and the gallant Frenchman, leaving his letters and journals for the English to forward to France, went his way, never to be seen alive again. It is one of the finest things in Banks's life that, though we were at war with France, never a ship left England for distant seas that did not carry a commission from him to seek for La Pérouse, the noble rival of Captain Cook. Every sea and every ocean cranny were searched, until the tragic mystery of La Pérouse and his two ships, wrecked on a coral reef, was cleared up.

Banks's presence with the expedition lent additional fame to the enterprise of Captain Cook, and the voyage was so successful that a second cruise was organised. Banks was to have accompanied it, and he engaged a staff and rigged up cabins on deck for their accommodation, with great receptacles for the plants, seeds, and animals he was to bring home. But the cabins made the ship top-heavy, and in consequence of unpleasantness the naturalist party withdrew. Instead of going a second time round the world, he supported the expedition with all his zeal, but himself went to Iceland; and on the way to Iceland he explored the mysterious isle of Staffa, which, though it had a name and a pinprick spot on the map, was all unknown. In Iceland he collected examples of literature as well as plants and insects, and he ascended Hecla, the ice-covered volcano, of which he said that after his exhausting climb he found one spot at the top free from snow and ice, but too hot to sit down upon!

The people of Iceland never forgot him; a quarter of a century later, when they were cut off from their mother country, Denmark, they turned to him in their trouble.

His travelling days were over with his return from Iceland; he married and settled down to a life of intense

THE COUNTRY LANE THAT LED TO AUSTRALIA

activity at home. The great pity for all time is that he wrote not a word for publication. He became President of the Royal Society in 1778, and kept the position until his death; he formed what is now the Royal Geographical Society, and sent out many travellers. He was a trustee of the British Museum; he was interested in every learned body of the day, and was consulted by kings and princes, statesmen and scientists, travellers and adventurers. His correspondence was world-wide, but not one word for publication did he write. He could not be bothered. He gave his experience to other men, and they wrote in their own name from the knowledge he had risked his life to get.

He built up an incomparable scientific library, and every scientist and earnest student was free to labour in it. His collections of birds, beasts, reptiles, fishes, and plants were at the disposal of all the world.

He brought together rich men and deserving poor men; he helped good men in need with counsel and money. He did more than that, for the spirit which prompted him to search for the lost La Pérouse animated his nature always. He it was who persuaded the Government to allow foreign scientists to go in peace on land and sea during the Napoleonic Wars, and Napoleon's reply was to accord the freedom of the seas to Captain Cook. In his own circle Sir Joseph Banks was a king,

and he wielded his sceptre for the good of knowledge everywhere. Our ships were always snapping up prizes, but, when they brought home collections gathered by foreign scientists, Banks would hunt the cases down and return them to their owners, even to enemy nations. Ten times during the wars did he succeed in sending to Paris collections captured from the French, and a note accompanying one of them was truly characteristic. "I send them back to France," he wrote,

"without having even glanced at them, for I would not steal an idea from those who have gone in peril of their lives to get them." If he heard of men of science imprisoned abroad, Banks would send money for their release or comforts to sustain them.

There was never anyone else quite like him. People called him an autocrat, and autocrat he was, but the most benevolent autocrat who ever lived.

It is good that he did attain so commanding a position, for when Australia was lying bare, with nothing but the remnants of a British flag upon its shores, and a few marks scored on trees to show where Cook and Banks had been, it was Banks who, by years of effort, finally persuaded the British Government to send out and colonise the land. He did not know how great a thing he did, but he was founding the Australian nation.



A CARTOON OF SIR JOSEPH BANKS AS A BUTTERFLY

THE CHILDREN'S TREASURE HOUSE

He worked at science until the last, in spite of years of agonising illness. When, crippled by gout, he died, on June 19, 1820, a strange thing happened. There was nothing to tell of his fame save a few communications he had made to scientific societies. It was as if, like Prospero in "The Tempest," he had renounced the magic power with which he had commanded admiration :

I'll break my staff,
Bury it certain fathoms in the earth,
And deeper than did ever plummet sound
I'll drown my book.

His name and fame have faded,
and he was only to be found here and

there in the travels and descriptions of others. He who had known everybody in his generation throughout the world became himself forgotten. Over a century elapsed between the writing and the publication of his journal on his journey round the world. His papers and diaries were either locked up in museums or sold and scattered.

But Time, which does all things well, has saved the fame of Sir Joseph Banks, and we remember him today as one of the men of two empires—the Empire of Britain overseas, and the empire, wider and greater yet, of knowledge everywhere.



A WOMAN OF PRINCE
WILLIAM'S SOUND



A MAN OF MANGEA



A DANCER OF OTAHEITE



A YOUNG WOMAN OF
THE SANDWICH ISLE



A FRIENDLY ISLANDS KING



PICTURES FROM AN ARTIST'S BOOK OF HIS JOURNEY
WITH CAPTAIN COOK AND SIR JOSEPH BANKS

SIX DAYS OF THE EMPIRE

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THE DAY THAT SAVED THE WORLD

ONLY as the fog of battle slowly thins away do the events of the war appear in all their true significance. Only after the lapse of many years is it becoming generally known that the fate of Christendom and the entire world turned upon the action of less than four hundred Worcestershire men on October 31, 1914.

When this little band of English heroes defeated their enemy at Gheluvelt, by Ypres, they shaped for thousands of years the life, mind, and character of men and women yet unborn.

The check to the two million German invaders, effected along the Marne by the outnumbered French and British force, was not decisive. In the second week of September, 1914, the apostles of the modern system of military and industrial despotism were staggered for a moment, but not beaten. They swerved from the heart of France and thrust, with an amazing increase of fury, at the heart of Britain.

Their armies raced to the sea. They won Antwerp and Zeebrugge, and, with hundreds of thousands of new soldiers swelling out their mighty original force, they closed down towards the Straits of Dover. Their conquest of Calais was to open, with every advantage of position, a direct attack on the British Isles. New and terrible instruments of destruction—the submarine, the floating mine, gigantic guns throwing a ton shell twenty miles, Zeppelins and flying machines—were to be brought in overwhelming strength against the British race.

Grand-Admiral von Tirpitz had already planned to use Calais and Boulogne for mining and submarine

operations on a decisive scale. He intended first to stop the transport of British armies and war material to France, while the German armies slowly wore down the French forces. Then, by prolonged piracy, conducted with hundreds of submarines, he designed to starve into submission the unsupplied and unprepared island race that could not grow its own food.

All that had been won by the Allies on the Marne was to be wholly lost by them at Ypres. The Germans brought up three-quarters of a million of men, and more than three thousand guns, together with the gigantic siege artillery that had broken the fortifications of Liège, Namur, and Antwerp.

They arrayed this tremendous force from the Flemish shore to the south of Lille. Opposing them was the small, wasted, and worn-out Belgian force, with scarcely a hundred small guns that could still be fired. Assisting these were twenty thousand French troops, with about eighty light guns, and some British warships firing on the enemy's sea-flank.

The half-broken and fatigued Belgian army temporarily saved itself, and finely helped its Allies, by breaking the Flemish sea-wall and flooding the ground by the Yser River; but this was only a transient measure of relief. General von Moltke, the German Commander-in-Chief, instantly changed the direction of his main attack, and, keeping the Belgians and Frenchmen at play with 150,000 troops, hurled 600,000 men against the British line.

The British forces consisted only of seven infantry and three cavalry

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divisions. Already wasted by severe fighting, they numbered considerably less than a hundred thousand men at the time when the grand battle for the world was closely engaged. The British guns were already badly hammered by the enemy's gigantic pieces, and barely six hundred of them remained in action. There was but one British gun, or less, against six German pieces. The largest British gun, of which there were very few, was six inches in calibre, while hundreds of the German pieces ranged from eight, eleven, twelve, and nearly seventeen inches in calibre.

As a crowning disaster, the completely overwhelmed British artillery had no high-explosive shell whatever, and hardly any shell of any kind. Each gun had to be placed on an allowance of ten shells a day, at a time when five hundred shells a day would not have been enough.

When the Odds Against the British Soldier were Thirty-six to One

The German artillery had an enormous amount of heavy high-explosive shell; they had all the shell originally accumulated for the destruction of Paris. In these circumstances, more tragic than any which had occurred in British history, the British rifleman had to fight practically unaided against three thousand cannon and siege guns, tens of thousands of machine-guns, and six hundred thousand bayonets and rifles. Scientifically calculated, the odds against the British soldier were at least thirty-six to one.

The British forces were thinly stretched out for thirty miles, in front of Ypres and behind Lille. The German commander first attacked the southern part of the British line, in order to compel Sir John French to place there what small British reserves there were available. Sir John brought up to the southern part of the Lille ridges his last fresh troops, consisting of some thirty thousand Indian soldiers.

In the meantime, the skilful enemy commander made his grand thrust with his main forces, against the remnants of the 7th Division, the 1st Division, and the 2nd Division, which,

with small cavalry supports, were lined out in front of Ypres, near Gheluvelt. More than half of this little British force was destroyed before the critical conflict opened at the end of October, 1914.

One Man in Twenty Yards Against Ten Enemies in One Yard

For sound defence there should have been one man to the yard, with men behind to fill any breach the enemy made, yet at the beginning of the conflict the British Corps Commander, Sir Douglas Haig, had only one man to every seven yards of front. At the decisive phase of the battle he had not one man for every twenty yards of his line! The German commander had more than ten men to the yard; they were arrayed in vast grey masses, one behind the other.

As the first mass fell, another mass came forward to carry on the swarm attack. In daylight and darkness the grey flood surged onwards, stopping only to allow the thousands of guns behind it to pour another tempest of flying steel, high explosive, and spreading cones of shrapnel bullets upon the scattered British force of fifteen thousand men.

These men had no trenches in which to crouch for cover. The huge German siege-gun shells blew in the shallow ditches that had been hastily made during the first fighting. The soldiers at last remained out on the open field, in the shell-holes made by the enemy's heaviest projectiles.

Like a Line of Sentries Fighting the Densest Mass of Troops Ever Known

At times there were such spaces in between one British soldier and another that large German forces were able to march unnoticed in the gaps in the British line, and fire into the backs of our troops, while other German forces fired into their faces. Cooks, with Army stablemen looking after horses in the rear, and men engaged in provisioning the infantry, had to be gathered together to hold up the Germans who had broken through.

It was the most horrible nightmare of a battle known in history. The British front became little more than

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a line of sentries, with no fighting forces behind it and the most powerful mass of attacking forces ever known in front of it. Nobody yet knows how the last of the Regular soldiers of Great Britain managed to hold on. They did not know themselves. They were hollow-eyed from want of sleep, dulled

each grand attack the foremost force was relieved, and sent to the rear to sleep, while the British soldiers could neither be relieved nor reinforced. At that time Great Britain had no more trained soldiers of the Regular Army, and the Territorial troops had scarcely completed their battle organisation.



AN ENEMY SURRENDER IN THE FIGHTING NEAR YPRES. IN THE BATTLE THAT SAVED THE WORLD

by the shells continually bursting round them, and often tortured by thirst and weakened by hunger. Many of their gallant assistants fell while trying to bring rations through the enemy's deep curtain of fire.

The enemy commander kept his men fresh and well supplied. After

The result was that the little Regular Army of the United Kingdom perished while holding the gate to Calais and saving their own country, and France, and the world.

The crisis of the battle came on October 29, and continued for two days. By this time the enemy had driven a

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few thousand half-broken Scotsmen and Englishmen back down the road from Menin to Ypres. They were the 1st Grenadier Guards, the 2nd Scots Guards, the 2nd Border Regiment, and the 2nd Gordon Highlanders—four thousand men, of whom less than two thousand survived. Connecting with them across the Menin road was the 1st Brigade, consisting of the 1st Coldstream Guards, the 1st Scots Guards, the 1st Black Watch, and the 2nd Munster Fusiliers, all wasted almost as badly as their comrades across the highway.

How the Red Man of Berlin Watched the Great Battle

The German Emperor in person watched from Menin the opening of the critical battle. He launched an army corps of forty thousand men against the remnants of the two British brigades. There were ten Germans to one Briton. Under cover of a thick fog the Germans broke through the Black Watch and the Grenadiers, and fired on them from behind. Of the Grenadiers only 150 men remained; out of the Gordon Highlanders only a little more; while the Black Watch was the hardest hit of all. It had not an officer left, and only a handful of men. Nevertheless, the survivors managed to drive back the enemy, and by a great effort rallied round the village of Gheluvelt.

In the evening of October 29 the German Emperor brought up fresh forces numbering one hundred and twenty thousand men. The British troops opposing this host at the critical point along the Menin road then numbered less than three thousand. On October 30 the Kaiser and his Chief of Staff sent another force of eighty thousand men against the British line, and captured the hill position of Zandvoorde, south of Gheluvelt.

The Fate of the World in the Balance of a Battle

Then at dawn of the day of destiny, October 31, 1914, the fresh German forces of 120,000 men were launched by their commander, General von Deimling, into the battle for the village of Gheluvelt—and for the whole earth.

Everything at first went against the little band of Guardsmen, Highlanders,

and Munsters who were holding the highway running through Ypres to the Channel ports. Their commander and one of his generals were put out of action by a heavy shell that pitched into headquarters in the Manor House of Hooge. One general was wounded, another was stunned, and most of their Staff officers were out of action. The brain of the Army was injured at the moment when its wasted body seemed to be giving way. Sir John French and Sir Douglas Haig hurried along the Menin road, improvised some means of commanding the stricken divisions, and then remained in the open on the road, helplessly and almost hopelessly watching a few hundred Englishmen, Scotsmen, and Irishmen decide whether the world should fall under the foot of the Prussian hordes.

Yet, greatly as the British troops had been reduced in number, the odds against their survivors did not increase, but actually diminished, for in each of the great conflicts around Ypres the Germans had fallen in tens of thousands.

The Man Who Aimed Straight and True Twenty Times a Minute

The single Briton killed masses of Germans, often by the score and sometimes by the hundred. Never had been such marksmen in the world as the Regular British soldier of the year 1914. He had been trained to fire from his rifle twenty or more rounds a minute, and to aim straight and true every time he pressed the trigger.

Twenty rounds of aimed fire a minute was the average. There were, however, many men who could bring forty Germans down in sixty seconds, when the enemy was advancing, shoulder to shoulder, in a grey-blue mass that could not be missed. When the British soldier began to fire, he had one cartridge in the breach of his rifle, ten cartridges in the magazine, and close at hand clips of five cartridges, which he fed into his rifle with mechanical rapidity.

Not until he had used up a hundred rounds did he need a further supply of ammunition, and when ammunition abounded the only thing that stopped him from killing Germans by the

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thousand, when he had a clear field of vision, was either that his rifle grew too hot for him to hold or that the enemy mass broke up and fled.

In marksmanship the bowmen of Crecy and Agincourt were clean excelled by the riflemen of Ypres. The dense masses of German infantry were actually killed or maimed in hundreds of thousands. Their total losses in the end were at least three hundred thousand men.

The result of this was that the gigantic conflict between a million men finally narrowed into a small affair of hand-to-hand fighting between less than half a thousand Englishmen and a few thousand Germans. In the morning the enemy rolled back what remained of the 1st British Division and of the British 7th Division. The 7th Division was reduced from twelve thousand men to little more than three thousand, and the 1st Division was almost as much enfeebled.

As the British line began to fall back, pursued by a tornado of shell from the German artillery, a great gap was left on the Menin road by the ruins of Gheluvelt.



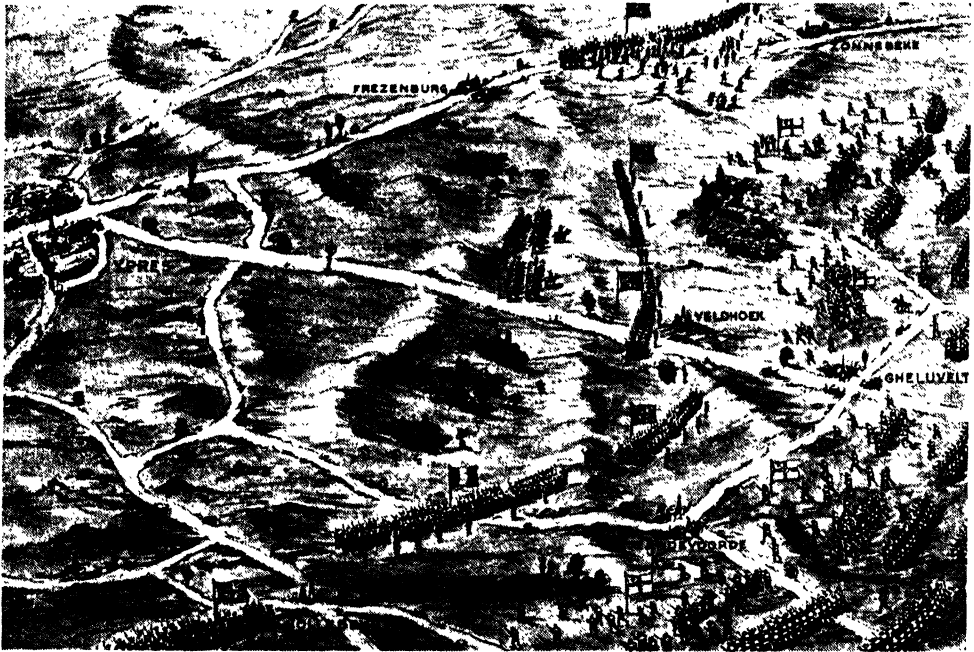
GENERAL CHARLES FITZCLARENCE, WHOSE NAME WILL LIVE FOR EVER
In the critical hours of Oct. 31, 1914, General Charles FitzClarence, seeing a gap in the thin British line near Gheluvelt, ordered 400 Worcester men to fill it. They filled the gap, took the village, and saved the battle of Ypres. General FitzClarence was killed twelve days later, but their leader, Major Hankey, survived the Great War.

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It seemed that the Germans had only to walk through and get behind what remained of the British army, cut off the small French and British forces northwards along the Yser, and take the Channel ports as the easy prize of their victory.

Sir John French and Sir Douglas Haig could not do anything except walk forward along the Menin road, to join their broken troops and die fighting rather than fall alive into the enemy's hands. They had no men left to fill the great gap. As they went

veloped on one wing, and thrown back from the gate to the sea, its remnants were too small to resume the attack, but the brigadier saw, on the north of the line, an English battalion unengaged. It was the 2nd Worcesters. The enemy was not directly attacking their part of the line, but working round the back of it. The Worcesters had already lost half their strength, and were actually only half a battalion, numbering 550 officers and men. Though they were not under his command, General FitzClarence brought



A DIAGRAM OF THE BATTLE LINE AT YPRES WHEN THE FATE OF THE WAR TREMBLED IN THE BALANCE NEAR GHELUVELT—THE GAP INTO WHICH THE 400 WORCESTER MEN FLUNG THEMSELVES

forward with their Staff officers to find a soldier's grave, they saw, to their amazement, a small group of khaki figures carrying out the most desperate attack men have ever made. It will be remembered that the 1st Brigade of Coldstream Guards, Black Watch, Scots Guards, and Munster Fusiliers had held the north of the Menin road at Gheluvelt. They were commanded by Brigadier-General FitzClarence. He was "the man who saved the world." When his little force, wasted by its great victories, was at last en-

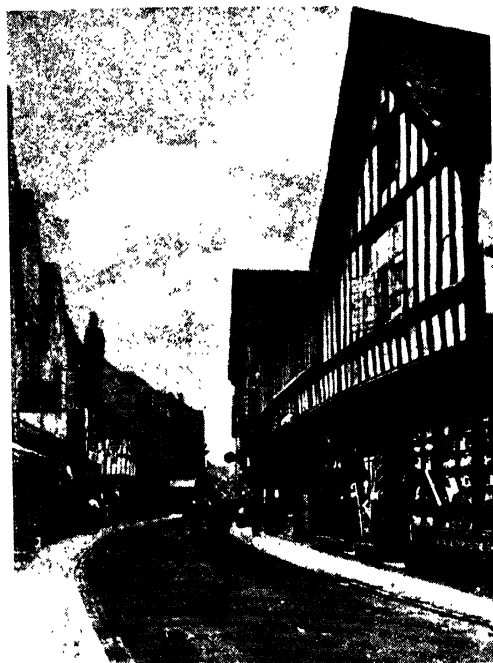
them forward, and threw them into the gap along the Menin road. One company moved aside to guard the right flank of the advance; the other three companies, consisting of less than four hundred men, under Major Hankey, stormed forward with the bayonet.

They had to cross 220 yards of open ground, over which the enemy artillery was maintaining a rain of shrapnel bullets. A quarter of the small attacking force fell under shell fire, leaving less than three hundred men to recover and hold the gates of

HOMELAND OF THE WORCESTER IMMORTALS



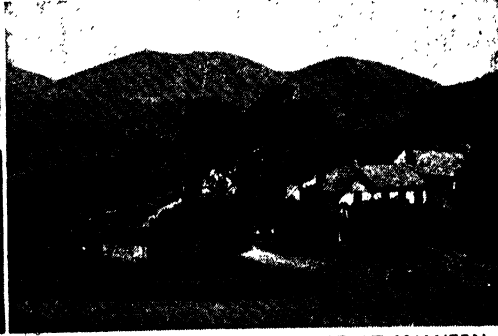
THE STately CATHEDRAL ON THE BANKS OF THE SEVERN AT WORCESTER



THE ANCIENT GABLES AND TIMBERS OF THE TOWNS AND VILLAGES OF WORCESTERSHIRE



THE BEAUTIFUL BANKS OF THE AVON



THE TOPS OF WORCESTERSHIRE AT MALVERN

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civilisation. But the loss of their comrades only increased the driving power of the remnant of this brave battalion. They drove at the enemy with the bayonet ; they stabbed and shot their way back into the village ; they chased and fought the Germans from house to house, from cellar to cellar ; they won back all the trenches and victoriously linked up with the South Wales Borderers, who had held firm on the north. There were 363 men and officers from Worcestershire holding Gheluvelt on the evening of October 31, 1914, when the half-company that had guarded the flank

send along a single division in order to win the world that night. Yet at the close of that fateful day he launched neither a division nor even a brigade. His enormous army of six hundred thousand men had been so handled that it was in a worse condition than the stricken British army. The German forces were still numerous ; they still consisted of some hundreds of thousands of men ; but this host had lost what was, in this awful crisis of the world, more important than mere numbers.

It had lost courage. So unparalleled had been the slaughter of the Germans



THE RUSH OF THE WORCESTER MEN TO FILL THE GAP AT GHELUVELT

of attack moved into line to assist their comrades.

In the night they drew a little back from the village, to obtain better cover in a trench the enemy had not completely broken, and there they desperately waited for the enemy's final counter-attack. All the regiments alongside were wrecked. One was reduced to sixty men and two officers ; another to ninety men and three officers. Where more than four thousand men should have held the line, there were not four hundred. The German Emperor had only to

that both commanders and men were afraid to attempt another counter-attack. Some German prisoners were afterwards asked why they did not make another advance on this day of destiny, and sweep the broken, outworn Worcesters and the Welsh Borderers back from Gheluvelt. The Germans made an extraordinary statement. They said they knew it would be no good trying to make another attack, because they could see, between Gheluvelt and Ypres, large reinforcements hastening to the battle line ! There were, of course, no reinforce-

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ments there ; the vision of the Germans was pure imagination. We think the explanation is a simple one.

Under conditions of extreme fatigue of mind and body, waking dreams occur. Brave men, whose bodies are conquered by fatigue, but whose spirits are indomitable, will not give way. Even when their minds are beginning to wander they dream that help is near. Spectral visions of this kind can be communicated by the power of collective suggestion when all mind and eyes are strained to a condition of nervous breakdown.

mistook the dance of dust raised by their own shells on the British rear for the gathering of British reinforcements. Their vision of defeat was significant of the depression into which they had been beaten.

The enemy of mankind was beaten not only in body, but in soul. Though he afterwards brought up all his distant reserves, and ended by launching all the Prussian Guard along the Menin road, he could in no wise recover from the grand defeat inflicted upon him by three hundred men



THE GUNS THAT HELD BACK THE GERMAN ARMY FROM THE CHANNEL PORTS

Thus arose all the historic legends of supernatural assistance arriving in desperate crises of battle—the appearance of St. Michael in battles between Christians and Saracens, the fancies of Joan of Arc, and the vision of the Angels of Mons in modern France. All these were figments of imagination, yet somehow spiritually real, in that they were a projection of the indomitableness of mind of men standing in desperate need.

The reverse kind of hallucination had seized upon the Germans, who

from Worcestershire. The world had been saved from Prussianism, and so conscious of this fact was the German Emperor that he dismissed his Commander-in-Chief, General von Moltke, and, building up a new armament, turned eastward against Russia. Daunted by the almost miraculous achievement of the army he had called "contemptible" because it was small, he was afraid again to employ his main force against the new British armies that held at Ypres the barrier to his dominion of the world.

THE IMMORTAL BOY OF JUTLAND



JACK CORNWELL AT HIS POST IN THE BATTLE OF JUTLAND, WHERE HE STOOD BY HIS GUN IN THE
FACE OF CERTAIN DEATH

This fine painting by Mr. F. Salisbury is issued by the Fine Arts Publishing Company.

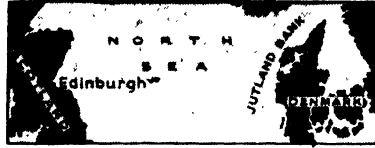
WHAT HAPPENED AT JUTLAND

IN the afternoon of the last day of May, 1916, the British Cruiser Fleet was sweeping towards the southern coast of Norway to meet the British Grand Fleet. When the two fleets were more than a hundred miles apart, the German battle-cruiser squadron boldly thrust itself between them. It was a trap to catch the Cruiser Fleet before the Grand Fleet could intervene.

Behind the venturesome five German cruisers, under Admiral Hipper, was the German Battleship Fleet, under Admiral von Scheer, who had designed the trap for the British Cruiser Fleet. He was a bold and capable man, who had spent years in studying Nelson's ways of fighting and applying them to modern warfare. In the course of the war the German Emperor had tried several other admirals, but none of them could do what he wanted done. They had all been dismissed, and Reinhold von Scheer, the man of hard, daring temper, was given command of the High Sea Fleet.

His plan was simple. Admiral Beatty was frequently making sweeps off the southern coast of Norway, with six British cruisers and four fast battleships. To lure these ten big ships into action against the whole German Navy, Scheer resolutely offered his five cruisers as bait. He reckoned that for fifty perilous minutes his only battle-cruiser squadron would be exposed to the fire of twice the number of British ships, but after this ordeal he expected to overwhelm Admiral Beatty's forces.

There was really something of the touch of Nelson in this scheme for sacrificing an important part of the German fleet with the aim of destroying a larger part of the British fleet, and the first phase of the action was surprisingly successful. Scheer was



astonished at his successes. They came before he expected them, and in a way he had not foreseen.

The preliminary action opened by the shallows of Fisher Bank, about a hundred miles from the Jutland shore. Admiral Beatty could bring only his six cruisers within range of the five hostile cruisers; the four British battleships were still sixteen miles from the enemy when Hipper turned to steam back to his main fleet, and during the cruiser action they never fully caught up with him. This greatly reduced the odds against Admiral Hipper. His ships were five against six instead of five against ten, and though his five had only 44 big guns, ranging from 11 to 12 inches in calibre, against 48 bigger British guns, ranging from 12 to 13.5 inches in calibre, his general power was superior. The German showed this by delivering two terrific blows in quick succession. He first led the British pursuing squadron over water where a flotilla of his submarines was submerged in ambush. Then, as Beatty was skilfully escaping from torpedo attack, the *Indefatigable* blew up at the end of his line, and soon afterwards the *Queen Mary*, the second ship in his line, went up in roaring flame, heeled over, and sank.

Two British battle-cruisers were gone, with about 1800 fighting seamen and 16 big guns. What made the disaster worse was that no torpedoes from the hiding enemy submarines had wrought the destruction; our ships were hit by direct gunfire of appalling swiftness, 44 Krupp guns being concentrated on each of the two masses of armoured steel, piercing it through. It was the bitterest surprise the British Navy ever knew. It seemed for the moment as if German gunnery was superior to British gunnery. Happily, this was not so. The

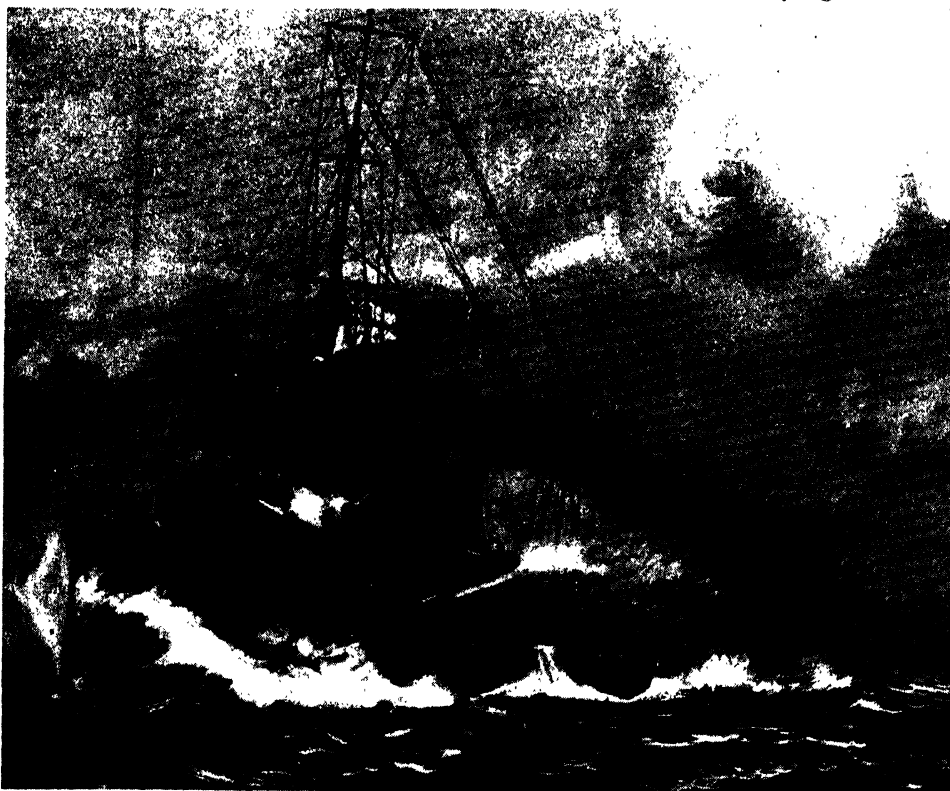
THE CHILDREN'S TREASURE HOUSE

explanation was that the British ships had lighter armour than the German ships. Armour had been sacrificed to speed. British ships could steam faster than German, but could not withstand so much gunfire, and the decisive problem was: Which is the instrument of victory, higher speed or thicker armour?

Despite his heavy losses, Admiral Beatty had no doubt. He held on his course towards the German battle-

Hipper's big ships, and ended an amazing run by driving into one of Scheer's leading battleships and launching their last torpedoes at her.

In the meantime, the four fast British battleships proved that speed was better than armour. They got within long-distance range of the five big enemy ships, and, though more than eleven miles away, they pitched enormous 15-inch shells at them. The scene beneath the low-lying cloud and



THE TWO GREAT FACTORS ON WHICH THE BATTLE OF JUTLAND DEPENDENT WERE GUN-POWER AND SPEED. HERE WE SEE A WARSHIP RACING AT TOP SPEED THROUGH THE WATERS

ships, which had thicker armour and more powerful guns than Hipper's triumphant squadron. Hipper, thinking the Britons must be badly shaken by the loss of a third of their main force, sent a strong flotilla of destroyers in a torpedoing charge upon their battle-line. But the hostile destroyers did not get within striking distance. They were met by a smaller force of British destroyers, which sunk two of them, broke through the rest, fired torpedoes at

the sullen grey of the North Sea was of terrible grandeur. The mighty ships hurtled through the water, to the unearthly drumfire of continual crashings of their broadside tempests of shell. Where the shells missed, the sea rose in gigantic spouts two hundred feet high; where the shells hit, the steel blazed, and if the armour held there was the flaming roar of the explosive and the scattering of the metal splinters.

The crews of the big guns were sheltered in turrets, but the gunners

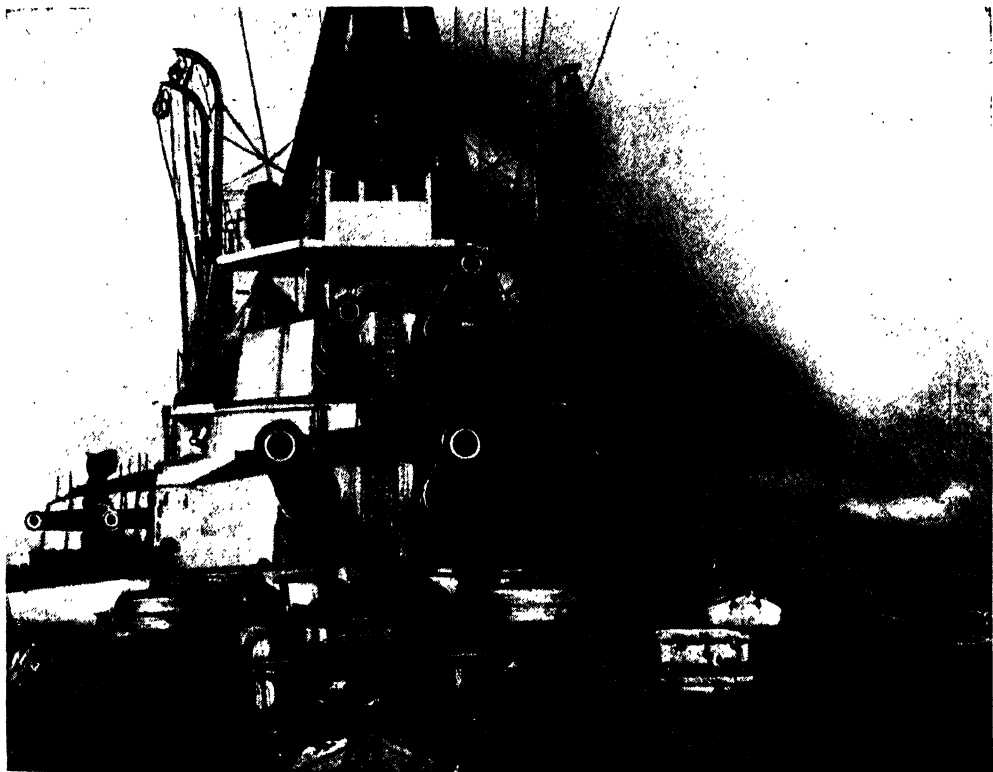
WHAT HAPPENED AT JUTLAND

who worked the smaller guns against hostile destroyers and submarines had no protecting armour. Shell-bursts and shell-splinters spread death among the men, and when the British admiral thought his broadsides must have put out of action most of the crews of the secondary armament he sent his destroyers out on a fierce, zig-zagging torpedo charge.

Other men worked calmly in the open on the big ships, some repair-

were served more slowly. They could not hit as they had hit in the opening of the action, while the British gunlayers, on the other hand, became more steady. By half-past four Admiral Beatty's men had, by hard fighting and coolness, gained the whip-hand of Hipper's men.

Well it was that they had done so. Twelve minutes afterwards Admiral Beatty, watching from his flagship, saw the grey shapes of Scheer's battle



THE MIGHTY GUN-POWER OF A FLOATING BRITISH FORTRESS. IN THE CRITICAL HOURS OF THE BATTLE OF JUTLAND THE DECISION DEPENDED ON THE BALANCE OF GERMAN GUN-POWER AND BRITISH SPEED

ing the wireless apparatus, which was often shot away; others rescuing the wounded and conveying them below; others extinguishing outbreaks of fire or performing tasks requiring superb steadiness in such a tumult of peril as mortal men had never before endured.

It was a supreme test of the character of the British and German races. The Germans were known to be defeated long before they lost their first big ship. Their shooting grew wild. Many shells fell short, and the guns

divisions moving up to envelop him. There were then four British battleships and four British cruisers against seventeen modern battleships, six pre-Dreadnought battleships, and five cruisers of Germany. In light craft the disproportion was still greater, and in heavy gun-power Beatty had 64 pieces against about 250 enemy pieces. Some of the German battleships had double the thickness of armour of some of the British cruisers, and Beatty knew how good the shooting

THE GUNS OF A DREADNOUGHT RING OUT ACROSS THE SEAS



In delivering a broadside, the armoured turrets swing round together at the touch of a lever, with all their guns on the enemy. Here the 12-inch guns of the Dreadnought are seen shooting at a gun trial ; at least one in every two shots will strike home, at five to seven miles, now that smokeless powder is used.

WHAT HAPPENED AT JUTLAND

of the fresh German gunners was likely to be. He had lost a large part of his main force when he had odds against the enemy, what could he do when the enemy had overwhelming odds against him?

Yet Admiral Beatty was a grimly happy man. He was in a position to avenge the loss of his two cruisers. Scheer had shown something of the Nelson touch, but Beatty had far more of it. At the outset he saw what the German plan was. He did not fall into the trap, he walked into it with a shovel in order to make it large enough to hold all Scheer's fleet.

His shovel was speed. His cruisers were much swifter than the more heavily armoured German cruisers, and his battleships were still better in speed than the best German battleships. Quickly he turned about, and began to race towards the northern end of the shallow fishing-ground of Jutland Bank, where, by wireless messages, Admiral Jellicoe was arranging to meet him with an overwhelming number of battleships. Scheer, who had tried to snare Beatty, was being lured into the net of the Grand Fleet. When the course of action changed from south-east to north-west, the superior gun-power of the German High Sea Fleet failed completely to tell against the diminished British Cruiser Fleet. Only the five enemy cruisers had sufficient speed to keep up with the British ships. Therefore they received the concentrated fire from the 64 British guns. The flagship of Admiral Hipper was sunk, and the German commander had to transfer to another ship. Only a few of the leading enemy battleships got within ranging distance of the British ships, and this they did by favour of the British admiral. Sir David Beatty had to lure the enemy delicately on. Had he used his top speed, Scheer would have been discouraged, and broken off the chase before meeting Admiral Jellicoe's gunners. Yet the quicker the enemy was brought into the general fleet action the more daylight there would be for the fire-control

officers and gunlayers of the Grand Fleet to see their targets.

At six o'clock, as the evening mist was beginning to gather quickly, the Marlborough, the leading ship of the Grand Fleet, saw Admiral Beatty's battle-cruisers. Unhappily, there was another series of disasters before the great British manoeuvre was carried out that took Scheer by surprise. The *Invincible*, the leading cruiser of the Grand Fleet, was sunk, with Admiral Hood and 780 officers and men, as she was swinging in front of Beatty's flagship. An old armoured British cruiser, the *Defence*, the flagship of Admiral Arbuthnot, broke through the German cruisers and destroyers that were trying to torpedo Beatty's big ships, sank one cruiser, and scattered the other light craft and drove close against the enemy battle fleet. The *Defence* went down gloriously fighting; one of her companion ships, the *Black Prince*, was crippled, and afterwards perished; while the other, the *Warrior*, after a gallant adventure, was saved by the powerful *Warspite*.

These losses, like the earlier ones, did not affect the great movement going on. Admiral Beatty put forth his utmost speed, and, veering right in the course of the Germans' path, crossed in front of them. This manoeuvre is known as crossing the "T." It is the supreme stroke in modern naval warfare. It brings the enemy's leading ships under fire from three directions. For some minutes Hipper tried to endure shells coming over his port side, and direct over his bows and starboard, but his trust in his heavier armour cost him another cruiser, and he was compelled to bend round to the south-west.

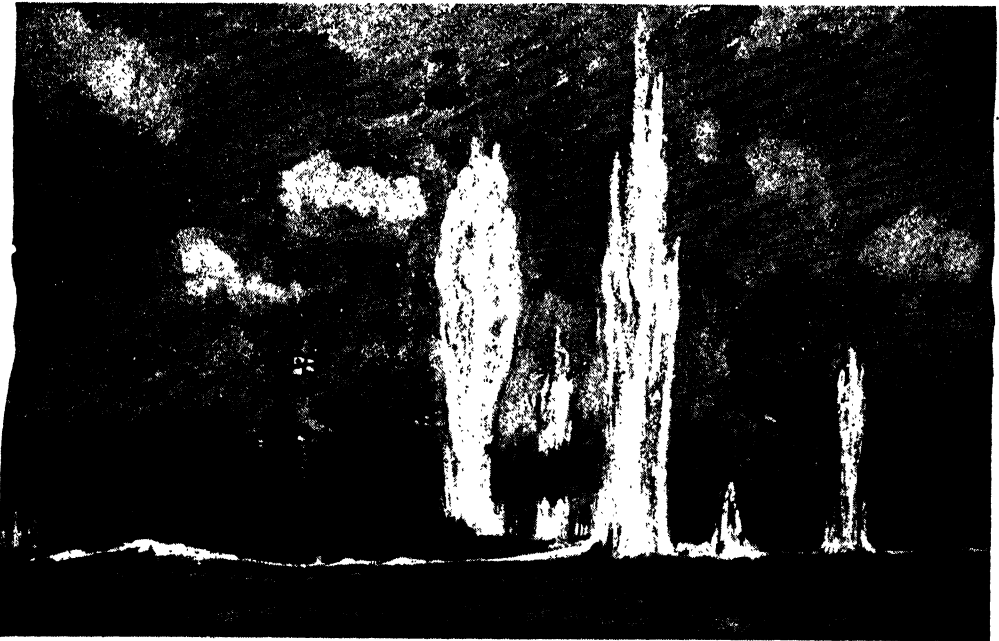
In other words, the German High Sea Fleet was cut off from the German coast, and was driven towards Scotland. That was how Admiral Beatty completed his principal part of the battle. Under intricate modern conditions, the achievement was as magnificent as the breaking of the enemy's line at Trafalgar. Had it taken place in clear weather, allowing the gunners of the Grand Fleet to shoot the

THE CHILDREN'S TREASURE HOUSE

German ships down at a range of eight miles, Jutland Bank would have been the scene of a decision as momentous as Trafalgar.

Unfortunately, though May 31, 1916, was a long summer day, the sea-mist gathered thickly in the early evening. Admiral Jellicoe swung his battle divisions down in overwhelming strength along the victorious turning course Sir David Beatty had taken. His gunners marked some of the enemy battleships still turning round by the top of the "T," and under one British broadside a great German

enabled that fleet to steal past the main British force and reach Wilhelmshaven in the early morning of June 1, 1916. Although the Germans escaped from the trap sprung by Beatty by dodging in the fog from Jellicoe's death-stroke, they lost a fifth of their ships, sunk or badly damaged, and this material loss was only of secondary importance. The fighting seamen of Germany lost courage, and, afraid to engage again in a general fleet action, they started a cowardly campaign of submarine piracy against the merchant ships of



WHEN THE GREAT SHELLS MISSED FIRE AND FELL IN THE SEA, HUGE FOUNTAINS OF WATER WOULD ARISE, OFTEN TWO HUNDRED FEET HIGH

ship heeled over and sank. But it was only in rare glimpses, through dividing and uniting swirls of fog, that the main forces of the German High Sea Fleet were seen.

When darkness fell on the foggy and smoky sea, British destroyers found some of the enemy battleships, and by magnificent charges, pushed to the uttermost of human effort, sank another enemy battleship and damaged other German ships. But the thick black weather that enabled the British light craft to get so deadly close to part of the hostile fleet

the world. In trying to avoid a serious naval defeat, they ran into a more terrible risk.

By refusing to fight the British fleet, and devoting all their energy to submarine piracy, they brought the United States into the war, with the result that American and British warships were at last united into an absolutely decisive Grand Fleet. This was an indirect result of the battle of Jutland Bank, and it more than outmatched in importance that complete naval victory missed through the evening fog.

HOW THE LUMBERJACK SAVED THE ALLIES

Canada has become a great nation. Great in territory, great in the boundless wealth of her cornfields, she needed one thing, the glow of a great tradition.

Now she has it. These men of Canada, these hard men who go out into the great spaces of the earth and make them fruitful, have crossed the sea and brought with them to Europe something that no man guessed they had, some matchless thing that lifts men to the height of heroes and very near to God. Once at least in the Great War these men saved the Empire and the Allies.

England has a thousand years of heroes, and she thinks of them with pride. Canada made her great tradition suddenly before our eyes, and this is how she did it. The story of how she crowned herself with glory on St. George's Day is told by Mr. Edward Wright.



The Lumberjack

1. The Green Veil of Ypres

ON the eve of the first St. George's Day of the war, April 22, 1915, a force of French and African troops held a line along the Yser Canal through the wide marshes between Ypres and Dixmude.

There were Arabs and Berbers from Northern Africa, with negroes from Senegal, commanded by French officers and supported by the picturesque Zouaves, who were Frenchmen dressed like Africans. The French colonial troops had proved good fighting men in the open field, and, although the winter climate of Flanders told upon these children of the sun, their attacking power remained magnificent.

Connecting with them near the hamlet of Poelcappelle was the First Division of volunteers from Canada. They were raw troops, most of whom had had no training at the outbreak of war, and their officers were mainly professional men who had done a little work in the Canadian Militia. Judged by the ordinary standard, the Canadians were soldiers of an inferior sort, being a new and hastily trained formation whose conduct in battle was likely to be uncertain. It was for this reason that the crack French division of seasoned Africans, renowned for their vehemence in attack, were arrayed at their side.

Just as evening was falling on this April day, the usual mist seemed to rise

on the outskirts of Houthulst Forest. But it was a very peculiar mist. It began like a low-lying green cloud, taking a more yellow tinge as it streamed up to a great height and came floating down to the French lines on a gentle north-easterly breeze.

The eyes of the Africans and Frenchmen began to smart; then something worried their throats and burnt down into the chest and made them choke. To the superstitious native troops, it seemed as though some horrible magic was being worked on them. Those who were most quickly frightened were the luckiest, for by running away, half suffocated and panic-stricken, they saved themselves from death by torture. The officers, Zouaves, and devoted natives who heroically stayed on, fighting for breath and trying to peer through the horrible green fog, were also fortunate, for they met a quick death. The worst burden of the agony fell on the men who remained until they were almost suffocated and then stumbled away with just enough strength to carry them, like confused, hopeless, disordered columns of misery, into the flaming ruins of Ypres and across the shell-swept bridges.

It was impossible to rally the fugitives. Even those who were not suffering severely or wildly struggling for breath were overcome by such terror as no white man could be subject to. They had stood magnificently

against the heaviest German guns. The explosion of a great shell was something they could understand. It was not death in battle that they feared, but they belonged to barbaric races, and the world to them was peopled by evil spirits which wizards could turn against them. To them the green mist was but a mysterious and ghastly force of wizardry against which mortal man could not prevail.

2 How Germany Prepared for the Poison War

WITH horrible cleverness, the German commander, Falkenhayn, had selected the French colonial troops for the surprise attack of gas, reckoning that they would be more frightened than any other of the opposing forces. At the Hague Conference his Government had signed an undertaking to abstain from the use of suffocating gases, but this promise was a German scrap of paper, given for the treacherous purpose of surprising other nations when the time came for the opening of the Poison War. The German chemical factories obtained chlorine from common salt, reduced the gas to a liquid by means of pressure at a low temperature, and introduced the liquid into strong steel cylinders.

On the afternoon of April 22, 1915, the gas-cylinders in the German trenches were fitted with nozzles stretching towards the French line. Then, in the favouring wind, the stop-cock was turned. The liquid flowed through the tubes, and, meeting the air, was reconverted into gas. For about a hundred yards from the German trenches the gas spurted low over the ground, and as the pressure in the steel cylinders slackened the gas-jets arose, forming the ghastly yellow-green fog-bank that drifted over the French lines.

As soon as the poison fumes began to affect the French native troops, hundreds of German guns added to the horror of the scene by flinging out a tempest of poison shells upon the black and brown troops in flight. Then German scouts and machine-gunners, all wearing gas-helmets,

came forward and explored the abandoned French lines, setting up machine-guns on every low ridge and knoll commanding the river marshes. After these advance forces, the German infantry of the line came forward, wearing special respirators as a safeguard against the heavy fumes still lingering in the hollows. They occupied the ridge north of Ypres, forced passages across the canal, took thousands of prisoners, and captured fifty guns, including four howitzers manned by London men, which the Canadians had lent to their French comrades. The London gunners fought to the death.

Appalling was the position of the Canadians. In all they consisted of some twelve thousand men, but only two brigades, with eight thousand men, were in the broken line. There were at least fifty thousand Germans against eight thousand Canadians, and, through the gap left by the French-African force, the grey masses began to work round the backs of the Canadians before these troops could see what had happened. Ypres, meanwhile, was pounded with huge shells, roaring like express trains as they came, and making craters forty feet across and seventeen feet deep.

3 The Men that Nothing could Break

THERE was no time to bring forward the reserve brigade and hurry British reinforcements to the broken French line. So quickly had the Germans profited by their outrage against the law of nations that they were shooting Canadians in the back and suffocating them with poison clouds long before help could come. In the meantime, the two imperilled brigades, consisting of the Second Brigade under Brigadier Currie, and the Third Brigade under Brigadier Turner, had to fight as men had never fought before to save Great Britain from starvation, the British Empire from ruin, and the whole world from dire catastrophe. The men covered their nostrils and mouths with socks or bits of their shirts, dipped in any liquid they could find, and with this slight defence against the gas struggled to hold the line.

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Falkenhayn was using his poison gas for the same end as that for which Moltke had driven three hundred thousand Germans to slaughter in the previous autumn. He wanted to reach the Channel ports, with a view to blocking the seaway with monster artillery and conducting a campaign of submarine piracy to starve the British people into subjection. He had failed to break through the British line with gun-fire and infantry, now he was trying with the deadly poison. Courage having failed, he was trying to beat the British by torture.

4

The Terror of the Poison Men

THE gap he had made in the French line was not sufficient to allow his army to pass through. His infantry crossed the canal in less than an hour, but they could not scout and march through the night, and had to wait until their guns and supply waggons were slowly drawn across the marshes and hauled into new positions. While their victorious right wing was carrying out these slow operations, their centre and left wing drove upon the 8000 Canadians, in order to destroy them and capture the knot of ten highways and four railways at Ypres.

Ypres was at that time of supreme importance as the centre of a network of communications from which the German army could rapidly advance to the coast. It could have been rushed in the night if the Germans had had enough courage, but many of them, fortunately, were too frightened to profit by their villainy. They had been told so much about the fearful qualities of the poison gas that, in spite of their respirators, they went forward with extreme trepidation. Every time they had to march down a hollow they waited fearfully for symptoms of poisoning, and stayed so long for the gas mist to vanish that the Allied troops had time to recover. Yet in the night of April 22 the Germans could have walked into Ypres.

Between them and the goal, in the most critical part of the line, was only a remnant of the Royal Highlanders of Montreal, who had lost nearly all

their officers, and were cut off and left without artillery support. All the Highlanders could do was to pretend that they were a strong force by yelling and cheering and shouting wildly. Happily, the Germans were so nervous that they waited until daylight came. Then they found only a major, running up and down the line and firing like a madman. There was method in his madness, for he was covering the retirement of the few survivors of his battalion, who were carrying their wounded away. The major was shot down and made a prisoner, but his wonderful stand saved the situation.

Downright pluck, alert intelligence, and great powers of endurance were of more importance in the opening of this critical action than good soldier-ship, and the half-trained Canadian was more than a match for the trained soldier of Germany. To speak quite frankly, there was a considerable number of rough characters in the First Canadian Division, and some of them had not favourably impressed the British people. They included some of the hardest and wildest types from those parts of the Dominion where the pioneer ruled. The lumberjack, or timber-feller, was the mainstay of some of the first Canadian battalions. He was a primitive sort of man, utterly out of place in a well-ordered city, but made of the finest human material on the earth. He was used to driving logs down rivers in the rush of snow-water, after living in winter in conditions that would kill an ordinary man. No athlete could equal him in real powers of endurance, and when he was caught by the poison gas, hammered by thousands of guns, and charged by crowds of German soldiers, he fought as only a lumberjack could.

5

The Thin Line in the Tempest of Death

WITH a rag round his face and fearful language coming from his lips, the Canadian pioneer more than made up in personal quality for his lack of discipline and precision of movement. There is a report that one battalion, almost entirely composed of lumbermen,

Two Hundred Men Against an Army

refused to obey the order to withdraw to a stronger line. Violently and heroically disobedient, it fought in its original position, and by enormous strength and endurance of body, and wild courage of soul, kept its line, held its weakened flanks, and survived. The tiger is said to charge after a bullet strikes its heart, killing as it dies. When gassed and wounded, the Canadian pioneer showed himself a sort of human tiger. Either he recovered much quicker than an ordinary man, or before he died on the battlefield he killed his enemies in a reaction against his own agony of body.

Between six o'clock and midnight the Canadian line was one of the thinnest ever held on any battlefield. Bits of the Third Brigade were occupying the ground from which the French coloured troops had fled, while the Second Brigade was scattered along the Grafenstafel Ridge to the Poelcappelle road. Behind both brigades the ground was swept by shrapnel from a thousand German guns, while the knot of roads at Ypres was broken up by the German shells. Through this hurricane of death the First Brigade and some British soldiers struggled to reach the half-broken and half-enveloped line of defence which was being pushed back to St. Julien.

About midnight the commander of the Canadian forces, Major-General Alderson, made the daring stroke that for the second time saved Ypres. He could not withdraw his overwhelmed men, or other parts of the line would have been cut off, Northern France would have been overrun, and the Belgian and French armies would have been destroyed. The plain thing to do was to bring the fresh troops into line with the two overwhelmed brigades, and strengthen all defences in preparation for another stand at daylight, but this General Alderson did not do. With extraordinary audacity, he attacked, and, instead of attacking from his steadier side on the right, he leaped forward with his left flank, which was still struggling to fill the gap left by the French.

The air was misty, with moonlight filtering through it, and about five hundred yards away from the position east of St. Julien could be seen the wood containing the four lost howitzers that had been lent to the French. In the wood were seven thousand enemy troops, building machine-gun positions, and against them advanced two battalions, the fighting Tenth of Western Canada and the kilted Canadian Scottish.

CREEPING forward in the hazy moonlight, they first captured a barbed-wired hedge and then charged for two hundred yards against the flame-lighted edge of the wood. Such was their speed that the German riflemen and gunners could not fire quickly enough to kill them all. Shouting like an army corps, the Canadians stormed the wood at the point of the bayonet, destroyed the lost guns, and pursued the enemy for a third of a mile beyond the wood. A fresh German force then tried to cut them off by a side attack, and the victorious troops fell back from the wood, after breaking up the centre of the German advance.

About four the next morning some 750 men of the Third Toronto Regiment moved up to support. The Germans had returned to the north end of the wood, and the two Toronto companies were set to recover some trenches the Africans had lost. They formed up on the left of St. Julien, in five successive waves, each man eight paces from his comrades. They had nearly half a mile to go to reach the position, and most of it they covered in rushes of sixty yards at a time. They lost a third of their men by the time they were 200 yards from the captured trenches.

Then Captain Straight, who was leading the charge, fell with a bullet in his thigh. His men became disinclined to rise, as it seemed that no one could live in the hail of lead that was pouring from the Germans. The stricken captain tried to rise, but could not. He dragged himself along for forty yards by catching hold of tufts of grass or digging his fingers into the soft earth. Then he blew his whistle for his men to join him. Ten times he dragged himself forward, and ten times his men, who loved him, rose up, rushed on, and dropped close to him.

"Come on, lads, come on!" the wounded captain cried continually, and, inspired by his agonising courage, the Fighting Tenth worked close enough to make the final leap. Two hundred out of 750 reached the trench, killed every German in it, and, under Major Kirkpatrick, fought the enemy off all Friday and until Saturday morning. The other 550 Toronto men were dead or maimed.

But on Saturday morning, April 24, the survivors of the shattered Third Brigade, with whom the Toronto men were connected, were broken by a terrific German attack, and sent reeling from St. Julien.

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All the front trenches in the village were captured by the enemy, and the little advanced force was cut off. Major Kirkpatrick then suggested that he should fall back on one side so as to keep in touch with the main retreating body. Again he was ordered to hold on, and told that reinforcements were coming up to counter-attack.

But the counter-attack failed, and at two in the afternoon the heroes of Toronto endeavoured to cut their way back. Only

to push back the right German flank. The French coloured troops were rallied and reformed, strengthened with Zouaves and supported by British soldiers, all of whom made another great counter-attack on the Saturday night. In the meantime, the rest of the Canadian Division had to continue fighting, day and night, between St. Julien village and the Zonnebeke road. They had to fight against fresh fog-banks of the green poison gas, tempests of shells, and the steady



THE LUMBERJACK WHO CAME FROM THE GREAT FORESTS OF CANADA TO SAVE THE ALLIES

a few got through, for a tremendous force of Germans closed on them from all sides, and the major and most of his remaining officers were made prisoners of war.

But this remarkable stand, made by two hundred Canadians against a German army, won the battle. It gave time for reinforcements to arrive. The gallant Belgian Carabiniers came to the help of the French along the Yser Canal, and greatly helped

rain of bullets. Incessantly the Germans attacked them, fresh enemy army corps being brought into the battle, until the original 12,000 Canadians were estimated to have fought against 120,000 Germans.

At daytime, in intervals between the infantry actions, the men could only rest in the shell-holes and scrape away at the sides to make caves for protection against shrapnel and plunging machine-gun fire.

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At night-time, when the enemy's bombardment of the trenches slackened, they had no time for sleep. Their comrades brought them food and ammunition, all carried through a zone of incessant gun-fire in the rear. When the men had taken food and drink, they had to creep from their shell-holes, fix up what wire they had, and dig shallow trenches to link the holes together. They fought all day and worked all night, and often put down their tools in the darkness to repel a mass of German infantry.

Always between them and the enemy they had a scattering of devoted men guarding them from surprise attacks. Few of these outposts lived through the battle, as they were the first to be caught with the gas and the first to fall when the enemy charged.

For a week the Canadians held the line that saved the Empire. When the main British relief came up at last by forced marches, and went through the German barrage to take over the Canadian position, there were scarcely more than two thousand Canadians remaining out of the twelve thousand of the old division. The Britons cheered themselves hoarse, and gripped the hands of the newly made veterans whenever they got in touch with them. *Canadians! Canadians!*—that was the British greeting when the weary, staggering, ragged two thousand went through the German barrage to their rest billets.

7

All that is Low Against all that is Noble

WHILE they were enjoying their first good sleep, the struggle for Ypres continued with increasing intensity.

Again and again the green cloud of death was rolled over Britons, Indians, Frenchmen, Africans, and Canadians. It was not until the battle of Loos opened, in the second week of May, that the enemy gave up trying to storm through the gate of Ypres.

But he really never had a chance of reaching the Channel ports in those days, after the first stand made by the Canadian division. When, on Saturday, April 24, the surprise effect of his poison gas was exhausted, there was no doubt whatever that Ypres would be held. What the Canadians fought for, in the second part of their action, was liberty of movement for the British Commander-in-Chief.

The magnificent endurance of the Canadian troops—the courage which stood against the foul devices of the enemy with his poison—enabled Lord French to keep the Ypres gate shut without upsetting

the plan for a Franco-British offensive arranged with General Joffre. Not only did the Canadians save Ypres, therefore, but they prevented France from becoming suddenly helpless at a time when the Russian front was breaking in Galicia. If, when the Russian front broke, the French and British forces had not attacked on the Western front and held the larger part of the German forces there, Russia would have made peace with the enemy in 1915. It is another extraordinary example of the power which a comparatively small body of men can exercise upon the fate of millions of soldiers and hundreds of millions of people.

In the eyes of the German High Command the first contingent of Canadians seemed contemptibly small. What were these thousands of half-trained men in comparison with millions of armed Germans and millions of armed Russians? Yet they were the factor of decision in both the theatres of war during the second crisis of this tremendous struggle for the world. Never did a new country create for herself a tradition of sublime heroism so quickly as Canada did. They bore themselves steadily against the most diabolical instrument of torture ever known to man.

This volume could not print the details of the sufferings of the Canadians and their comrades; they were too terrible for words to describe. The poison battle of Ypres showed, from the German side, all that is cruel and low in man, and, from the Canadian side, all that is noblest and most enduring. Many rough Canadian men who had offended the nice sense of people living around their camp in England proved in those days to be among the bravest spirits that ever walked the road of sacrifice.

It was the manhood in the lumberjack and his fellow pioneers that made them heroic in life and inspiring in death. One party of Canadians lost their lives by crossing the St. Julien road to guide some frightened Africans into safety. The language they used towards the panic-stricken Turcos was hardly courteous, because the lumbermen were angry. The Africans were not in supreme danger, yet the lumbermen went through German machine fire to death merely to direct these men into the safest line of retreat.

Truly they were rough diamonds, the hard characters in the First Canadian Division, but they shine for ever in our human story, and they saved the world in that night when Anti-Christ seemed likely to prevail. Even as Christ died did some of these men die, and Canada will not forget it.

THE BATTLE THAT SAVED OUR GATE

ON the evening of August 26, 1914, the Germans seemed certain to be the future masters of the world.

Their horsemen were riding to the sea near Dunkirk. Their infantry were breaking through the rampart of the Vosges Mountains and trying to thrust into the heart of France far in the rear of the main French armies. These armies had been beaten, and, with the British Expeditionary Force, were in hasty retreat.

There were only about one million Frenchmen in arms, and against them were two million victorious invaders. The French forces were being captured in tens of thousands, losing hundreds of guns. They had been shattered in the hills of Lorraine, in the wooded uplands of the Ardennes, along the Sambre in Belgium, and in the fields of southern Alsace. As fast as their feet would carry them they were withdrawing from the northern provinces and from part of their eastern frontier, leaving the richest of their lands, their coalfields, and iron-mines in the hands of the enemy.

The small British army that had landed at Boulogne was shifting its sea base far southward, and fighting desperately for life as it fled before the German host, down roads jammed with throngs of panic-stricken fugitives.

On the eastern front of war a great Russian army was also being broken by the Germans, driven into the Masurian marshes, and entirely destroyed, with a rapidity unparalleled in modern warfare. The swift succession of German victories over Belgium, France, Great Britain, and Russia was unlike anything that had occurred in history. In four weeks Germany appeared to have won the mastery over all the armies of Europe.

The gravest general disaster since the overthrow of the Roman Empire appeared inevitable. Every civilised man who knew what was happening scarcely cared to eat or work. Feelings

of utter despair worked in the minds of free men everywhere. If France, then the only great free nation in arms in Western Europe, fell under the sway of the slave-makers of military and industrial Prussia, no end could be set to the results of her defeat. It was clear that Russia would be compelled to sue

for peace, and it was very probable that the British commonwealth of nations, together with the United States, would eventually be subdued by the conquerors of the European continent. Our admirals knew the part German submarines would play in starving out the islands of freedom as soon as the invaders had settled in the French Channel ports, and captured the sea-gate of the British Isles.

As a matter of fact, only a very small number of English-speaking people understood at the time what was happening, and what it meant to them and to their children, and to mankind. Even now there are hundreds of millions of people who do not know that their bodies, their minds, yea, the very souls they had from God, were saved from degradation by the genius and courage of four or five French commanders.

General Joffre, the descendant of a Spanish-French working man who used to make casks for the vineyard-keepers on the foothills of the Pyrenees, was the man who did most to save France from being murdered and mankind from being degraded. The work he did in the last week of August, 1914, proved him to be one of the greatest war captains the world has seen. He had not, perhaps, a very brilliant mind, this short, plump,



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genial, fatherly old man whom the soldiers called "Daddy," but he was capable and had a capable staff, and his grand virtue was his imperturbable strength of character. Like a rock he stood, with most of his armies breaking around him. He did not sit up all night worrying about the new plans he was contriving. He went to bed about nine o'clock, slept well, ate well, rose early and steadily, and got through an amazing amount of work.

How the Calm, Great Joffre Wove the Robe of Victory for France

Joffre never worried, and his serene, patient strength spread through his staff, and was communicated to the French and British generals who came to see him. His first dispositions along the frontier had been correct, but some of the political generals of France had become unequal to the positions they had won by intrigue, and when they wrecked Joffre's first scheme he calmly made another plan, found new men, and while hundreds of thousands of French and British soldiers were scurrying away from the invaders, in apparent hopeless defeat, Joffre was weaving victory out of the railway system south of the Marne. Troop trains and munition trains moved in hundreds across France, while Joffre's lieutenants timed their departure and arrival, and kept in touch with the additional columns of men, horses, and motors crawling down the roads to the new battlefield.

The Commanders Who Sent Out Horsemen to Search for Their Armies

In the course of a day a great French army would change into a thin demonstrating line of covering troops, while its main forces vanished by road and railway to some secret destination. Officers who had commanded a few thousand men found themselves called suddenly to lead huge new armies gathering together with mysterious rapidity.

In some cases the troops placed under the command of a new man were still scattered about the country, some fighting rearguard actions, and some in apparent hopeless flight, and difficult to communicate with by

telephone or telegraph. The new commander had to send out horsemen and motor cyclists to collect information along the line of retreat before determining what was best to be done. Moreover, none of the new men had managed an army, and most of them did not know the qualities of the troops put under their charge. One of them, General Maunory, hastily travelled from Verdun to Amiens to assume control of the new Sixth Army. General Franchet d'Esperey gave up fighting rearguard actions below the Sambre and became commander of the Fifth Army. General Foch, after saving his country from complete disaster in Lorraine by the way he handled one fine division, jumped into a motor-car and, rushing along the south-eastern front, built up the Ninth French Army, while his men were speeding by road and railway to his final headquarters, below the Marne.

The German Armies Sweep Towards Paris at Thirty Miles a Day

In the meantime, the principal German armies were sweeping onward towards Paris at the extraordinary pace of nearly thirty miles a day. The German infantry in full kit could not march so fast, but they were provided with thousands of motor-lorries, carrying them forward in triumph swifter than their opponents could walk.

The feet of British and French soldiers bled and swelled in the ceaseless effort to escape being cut off by the German forces in the motor-cars. Men grew so worn by want of sleep that at last they dared not think of sitting down for a rest, knowing that they would fall into a sleep. Half the British army was, in fact, cut off at Le Cateau by German forces six times as powerful, and only escaped by standing to battle and fighting the enemy to a standstill. Divisions and army corps of Frenchmen were surrounded, killed, or captured, and it was only a worn, wasted, and fatigued multitude of men that General Joffre managed at last to arrange on the line where he meant to fight to the death. This line ran for nearly 200 miles,

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from the neighbourhood of Paris to the outskirts of Verdun. It was selected by General Joffre because there was a good network of railways and roads behind it.

Between August 26 and September 6 the Eastern and Central railways of France formed a loom of war, upon which trains rattled like gigantic shuttles weaving the robe of victory. General Joffre gave all the country between the Sambre and the Marne to the enemy, so that there should be more than 150 miles of wrecked railway tracks between the line the enemy was rebuilding in Belgium and the centre of the new Franco-British front. The Germans had to bring forward from their distant railheads all their artillery, shell, small-arms ammunition and supplies in horse-drawn waggons and motor vehicles. When they used half their ammunition in winning victories on the French frontier and fighting mid-way battles, they had to wait a considerable time while their empty carts and lorries went back to the railhead that was slowly being extended from the Ardennes and Liège.

How Joffre Trapped the Germans by Pretending to Run Away

This was why General Joffre made the retreat of the French and British armies seem like a flight. He pressed every man and every horse to the uttermost in order to get closer to his feeding railway lines, and, as the Germans felt that all resistance was weakening, they, in turn, advanced at the greatest speed they could possibly maintain. Their Commander-in-Chief, Moltke, thought he had only to strike the scattering and fugitive Allies, before they could get far enough away from him to re-form, in order to conquer the whole of Western Europe in a rapid battle that would be more like a chase.

He regarded the little British army as finished. By a brilliantly cunning trick in newspaper work the enemy was led to believe that Sir John French was utterly defeated, and his men dispersed among the fugitives from French and Belgian towns. The

British Censor allowed a sensational article to be published in London, deploring the loss of the British army. German agents communicated the news to German Headquarters by secret code. As the news seemed to confirm the view the commander of the First German Army, General von Kluck, took of the action of his forces at Le Cateau, it was decided by Moltke that no further attention be paid to "French's contemptible little army."

How the German Army Wiped the Old Contemptibles off the Slate

Thereupon, on September 3, the First German Army disdainfully swung away from the British on the north of Paris, and swerved down and across the Marne in order to join the Second German Army, under General von Bülow, in finally smashing up the French forces which had already been partly broken in the battles between the Sambre and the Meuse. Then it was that Joffre brought all his talent for railway management into action.

The situation on the critical day of September 5, 1914, was, thanks to the brilliant plans of Joffre, secretly favourable to France. The First, Second, Third, Fourth, and Fifth German Armies were curved like a vast bow between Verdun and Paris. Along the larger part of the curve, from east to west, there was opposing them a much inferior number of French troops and British troops, arranged in six armies; but while, on more than half the line, there were four German armies violently attacking three French armies, and gradually pushing them back by the weight of superior numbers and gun-power, on the smaller part of the line an extraordinary position of affairs had been arranged by General Joffre.

The Three Franco-British Armies Arrayed Against the Germans

From a point north-west of Paris to a point far south-east of the French capital, the great First German Army was widely extended in an attempt at an enveloping movement. It was trying to envelop the Fifth French

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Army, based on Nogent on the upper Seine. But anybody who knew all the facts could see at a glance that the hostile manoeuvre was bound to end in disaster to the Germans. *For there were three Franco-British armies arrayed against the single German army.*

On the northern wing General Maunory overlapped the enemy's rear flank.

In the centre the hidden British army threatened to outflank the Germans.

By the main French centre, the Fifth French Army was entrenched on high

Marne, and in a tigerish leap flung himself upon Maunory, while fending French's men away from his flank and keeping D'Esperey's army occupied.

The fact seems to be that General Maunory struck just a day too soon. He moved before the tired British army, tramping all the way from Mons, was ready to come into action. He suffered badly for his mistake. Kluck was ferociously anxious to destroy the rather small French force that had surprised his rearguard. He thrust at it with all his might of over-



THE VICTOR HOME FROM THE MARNE

ground above the Seine, to act as a buffer to the German shock troops.

General Maunory's and General French's men were effecting one of the greatest surprises in the history of war.

The battle opened on September 6. General Maunory's army burst upon the astonished enemy rearguard, and drove it back towards the Ourcq river in fierce, quick fighting. By the weight and vehemence of the blow Von Kluck recognised that he had not merely to deal with a raid on his communications but with a very serious attack. He turned back from the Seine with his main forces, crossed the

whelming numbers, in the hope of being able to destroy it in time to carry out his main programme far to the south.

But two other surprises were in store for the arrogant and boastful Prussian leader.

The army of Paris was suddenly to appear upon the field; and

The Old Contemptibles were to renew their strength like the eagle.

In the first place, the military Governor of Paris, General Gallieni, was a man of daring resource. He had a considerable number of troops guarding the ring of Paris fortresses and awaiting the struggle against the great German siege guns. Gallieni

THE BATTLE THAT SAVED OUR GATE

came to the sudden conclusion that Paris was not as important as France. He abandoned the capital, from which millions of fugitives had already departed, and, taking with him all the taxi-cabs he could find, motored his men, in the night of September 8, to the aid of the half-beaten Sixth French Army. This was the decisive movement in the battle of the Marne, and

retreat, the victor of Mons, with men driving towards his rear, with men thrusting into his flank, and with men eating into his front. Much of the fighting was terrific, especially with the two French forces on either side the British.

"If only we could break through on one side or the other," said Kluck to his staff, "we should be masters of France." So,



IT IS THE CONQUERING POILU AND NOT THE KAISER WHO COMES TO THE CAPITAL AFTER THE MARNE

the memory of the unending procession of soldier-filled taxi-cabs threading their boulevards is now a priceless possession of those Parisians who stayed to face the war.

It was beyond all expectation for the defenders of a capital city to leave their forts, make a march of two days, and fight far away from their fortress guns in the open field. It upset all the calculations of Kluck and the German High Command, for Kluck could not meet the additional force thus rushed against him. He had to

in a series of wild, convulsive efforts, dense German columns were flung recklessly to death, and the French troops reeled again.

Meantime, the British Expeditionary Force worked forward without a pitched battle. The situation was the most dramatic since Waterloo, and the extraordinary thing was that the drama was not expressed. There were merely skirmishes between German cavalry rearguards and British cavalry vanguards, with some infantry actions against slight forces. By the mere

THE CHILDREN'S TREASURE HOUSE

threat of their pressure, the British divisions instantly and completely decided the entire battle, and the immediate fate of France.

The happy issue was not directly due to the British soldiers nor to their brilliant chief. Neither was it due to the two French armies. By the chance of its position, the British force happened to become the master pawn in the hands of the master strategist, Joffre. He it was who got Kluck's First Army in such a trap that the mere forward movement of the British force, threatening to cut the German army in half, compelled the enemy to retire as fast as his foot, horse, and guns could move.

In other sections of this swaying struggle between three million armed men there was an abundance of heroic attack and counter-attack, with desperate resistances suddenly changing into vehement assaults; but the British army occupied the strangely calm centre of the cyclone of battle, and, simply by changing the direction of its movement, and walking against the German flank, it put such fear into the mind of Kluck that he turned about and raced his men northward until they dropped.

The Amazing Quietness of the Winning Stroke in the Great Battle

Napoleon never won a greater success in strategy than Joffre did then. Joffre had to fight long and heavily on most of his sectors, but at the most critical spot on the German western flank the mere show of the British force he had in reserve compelled the German commander to retire.

What followed was as strange and curious as the comparative quietness with which the winning stroke was delivered. As Kluck hastily swung all his main forces away from the reach of the British army on September 9, he left his eastern flank exposed to the Fifth French Army under General Franchet d'Esperey. D'Esperey found there was nothing left in front of him to attack, except some rearguards. He would not waste all his forces on these, and at once marched one of his army corps eastward to assist his neighbour, General Foch, who was still being hard pressed. At the same time, the commander of the Fifth French Army struck upward through the German rearguards and forced back the wing of the Second German Army.

The position of the enemy forces then became difficult and weak. The almost silent shock delivered by the British force began to travel all down the German line. Each weakening enemy commander called for assistance from his apparently strong

neighbour. When a locomotive strikes a standing line of carriages the jolt travels down the track. In the same way the blow struck at the First German Army east of Paris travelled along all the main German front, past Verdun to Metz.

Could the Allies Break Through the Wavering German Line?

Thereupon rose the question of making a break through the wavering and partly disordered German line. Each French army commander keenly watched for an opportunity, and, by a grand stroke of genius, General Foch, with one of the weakest of the French forces, found the joint in the enemy's armour, and pierced through.

All through the battle Foch had been terribly weak. He held the tableland of Sezanne, but he had not sufficient infantry to hold his front. His right wing was unoccupied for fifteen miles. All he could do was to set some cavalry there as an observation force, and trust that the enemy would not strike. When they began to press through the gap, Foch retired his covering force to gain time, while he brought one of his divisions from his left wing to his right wing. When losing ground in this apparently tragic manner, and allowing the French centre to be driven in by the best part of two German armies, Foch was asked by telegram what his situation was.

This extraordinary man replied to General Joffre: "My situation is excellent!" and at the same time a now famous epigram of his percolated through his officers to his desperately hard-pressed men: "A battle is only lost when men believe it is lost."

Turning a Defeat into One of the Greatest Victories in History

By invincible determination and rare skill, Foch succeeded in turning his defeat into one of the greatest victories in history. Immediately in front of him was a large marsh, from which some of the tributaries of the Marne rose. It was the marsh of Saint Gond, into which Napoleon, in 1814, had flung the Prussians. Foch was planning to do the same thing, and he was rather glad to see that his right wing was being driven in, because this apparently successful movement brought the attacking Prussian Guards down the side of the marshes, where they could be attacked sideways.

Foch had no men fitted to make the attack, but he found them. There was a fine French division, the 42nd, commanded by a man of the size of Falstaff, who had a name that suited him—General Grossetti.

THE BATTLE THAT SAVED OUR GATE

Grossetti was of Italian origin, and his name meant "the fat one." Jovial and humorous, he told his troops that there was nothing for them to do but to fight to the death, as they had a leader too fat to run away. His division had been struggling night and day on the western side of the marsh, and was so fatigued that it should have been drawn out of battle and given a rest. On the orders of Foch, Grossetti drew them out of the fighting line, but instead of letting them sleep he marched them in a long curve behind the French rear, and emerged unexpectedly at the head of them

their awful work, Grossetti's men again swept forward, and behind them trundled their light batteries. They outflanked the Prussian Guard, and threw them into the marsh. Simultaneously, the left wing of Foch's army, composed of a division of French planters and Moors from Morocco, smashed into all the German positions on the other side of the marsh, and left the fugitive Germans struggling in the morass.

In a few hours the spear-head of the army of invasion was scattered, and the remnants of it were bogged in a great quagmire. By the highway and railway



THE DASHING HORSES OF THE FRENCH DRAGOONS IN THE BATTLE OF THE MARNE

on the flank of the Prussian Guard. Again and again the Guards rallied and charged to the death. Often, as they came forward, Grossetti's men seemed broken, for backward they swirled like leaves before the wind. This, however, was only a subtle artillery manoeuvre.

There was a line of French batteries of incomparable 3-inch guns laid on the ground where the Prussians were advancing. Each gun could fire twenty high explosive shells a minute, and by an automatic device the shells were so spread that their concussion and steel splinters swept every yard of a wide area. When the guns had done

skirting the marsh, Foch launched his cavalry through the great gap in the German front. They got behind the Third German Army, broke it into fragments, and chased the fugitives as far as Châlons.

The battle of the Marne was definitely won. As all the Ninth French Army pressed forward in pursuit through the vineyards and wine farms of Champagne, they discovered one of the causes of their surprising victory over a force at least double them in number. The German aristocrats who officered the Prussian Guards had been tempted by the vast stores of fine wine of Champagne that fell into their possession.

THE CHILDREN'S TREASURE HOUSE

They began to drink themselves, and allowed their men to drink too.

There can be little doubt that most of the 48,000 officers and men of the Prussian Guards were, throughout the battle of the Marne, too drunk to perform their duties. Those who were only half drunk fought in savage frenzy, but without the alert intelligence necessary in their very perilous situation by the great marsh trap. They were not outfought so much as outwitted, and it is highly probable that the contest, in this most critical of all sectors, would have been more prolonged by means of a well-handled German manoeuvre had not both the Prussian Guards and the Saxon Army been partly overcome in advance by the hundreds of thousands of bottles of wine they had looted.

The great Allied advance that followed was conducted almost without fighting. The Prussian Guards, the Saxon Army, and the Würtemberg Army were shattered, and saved only by the hasty arrival of the Army of Metz. The First German Army, under Von Kluck, was terribly mauled, as was also the Second German Army, under Von Bülow, but the arrival of strong reinforcements enabled the retreating forces to make a stand along the Aisne, and to bring forward there some of the great siege guns built for bombarding Paris.

One of the Most Important Events in the History of Civilisation

When the German retreat ended on another very strong line, which was held for years, there was little apparent change in the general situation. The Germans were still much stronger in men, machine guns, and heavy artillery than were the French and British. They stood on a more formidable series of positions, and, swinging northward, renewed their attack and tried again to reach the Channel ports.

In appearance the battle of the Marne was therefore an indecisive conflict, yet in reality it was one of the most important events in the history of civilisation. It was decisive in regard to the salvation of France. Its moral effect was tremendous. It lifted from the French people the old shadow of defeat, and, by giving them renewed confidence in the virtue of their race, made them as stubborn and audacious as in the days of their great Revolution.

The victorious defence of France proved that the concentrated power of a mighty and efficient autocracy that could put an army of two million men in the field was at least matched by the warlike spirit of

an easy-going, negligent democracy that could only put a million men into the battle-line. The tradition of Prussian invincibility was destroyed, and the shackled and drilled German people themselves began to aspire to a free form of government.

In one way it did not matter whether, after the battle of the Marne, France were defeated or victorious. Even had she died, the blow she had struck for liberty would have kept the spirit of freedom from perishing from the earth.

The Blow that Kept Liberty from Perishing Off the Earth

For what had France done? She had shown that, with adverse odds of seven against four, an unprepared democratic republic could throw back the armies of an autocrat who had been secretly organising for war by years of intrigue, treachery, and concealed accumulations of weapons, human forces, and new inventions of destruction. France had triumphantly vindicated the genius of all free people, and gradually there gathered around her both the greatest and the weakest of other republics in the New World and the Old.

To Great Britain, the battle of the Marne, which prevented Germany from obtaining control of the seaports and resources of Europe, was the foundation of all future successes. Had France been thoroughly defeated and overrun, the British people would eventually have had to come to terms with the conquerors or be starved into submission. America would have been taken unawares, and would in all probability have been eventually defeated. Other States—such as Sweden, Greece, Spain, and Denmark—would have been so frightened by the terrible power of the German war-lord that they would have become, without a struggle, vassal territories. Russia would have remained an autocracy in submissive league with the Central-Europe Union. In less than ten years, perhaps, the Hohenzollern would have become the Master of the Earth.

The Stroke that Drove the Germans Into Their Burrows

All this was prevented by the brilliant and historic manoeuvre against the western wing of the German army along the Marne river, by which General Joffre compelled the Germans to fall back and burrow in the earth like moles to escape entire overthrow.

There can be no doubt whatever that the battle of the Marne, though not a really decisive conflict, ranks among the most important turning-points in human history.

THE BATTLE OF THE MOTOR-CARS



It is a far-flung battle-line for this land that has come to its dark hours, but it will lead us on to everlasting liberty.

Over mountain and sea, up great rivers and in the deserts, our men must follow the flag. From the ends of the earth come the shadows and threatenings that would destroy us, but our strength will not fail.

This is the story of the great plot in the desert which cast its shadow over the British Empire in the second year of the war. We see how the powers of evil linked themselves with ignorance and superstition, but we see how the powers of liberty linked themselves with greater things, and how they overcame.

It is the wonderful story of the defeat of the Senussi in the Sahara Desert, and of the victorious battle of a duke with thirty-two men and ten motor-cars.

IN the winter of 1915 there was a strange unrest among the Moslem races of Africa, from the Atlantic coast to the Red Sea. Blue-eyed Berbers, bronzed Arabs, and dark-skinned negroes were stirred by rumours of a great event. The bazaars of Cairo and Fez hummed with it, and men in white robes in Tunis and Algiers softly talked to each other about Ahmed the Senussi.

In the remotest part of the Sahara Desert was a great Mohammedan prophet, known to fame from Morocco to China. His ancestor had fled from Oran in 1830, when the French conquered Algiers, and, settling in the secluded oases of Siwa and Kufra, had built up a secret brotherhood that spread his doctrines from Nigeria to the Sudan, and became one of the most mysterious forces in the modern world.

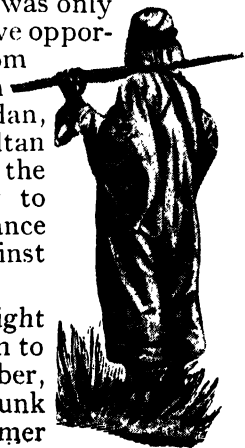
The aim of the Senussi Confraternity was to conquer Northern and Central Africa for Mohammed-

danism, and complete that work of converting the world which the Saracen and Ottoman had failed to accomplish centuries ago. They were the Puritans of Mohammedanism—severe, narrow, earnest, and brave. Poor and hard-working they were, and, with only the produce of the date palms of their oases to barter for food and arms, it took them many years to make a strong army. They helped Lord Kitchener to fight the false Mahdi of the Sudan, they struggled against the French forces in Borku, and, slowly gathering strength, they defeated the Italians in Tripoli, and drove them to the Mediterranean shore.

In the meantime, the original prophet died, and was followed in due course by Ahmed, the present chief of the Senussi Order. Ahmed is nominally an Anglo-Egyptian subject, but actually he is an independent prince, protected from attack by vast stretches of waterless sand.

When the Turks joined the Germans in the Great War, the attitude of the Senussi became very mysterious. He incited the Moors to rise against the French; he collected the Bedouins of Tripoli for fiercer action against the Italians; but he professed that he still remained the firm friend of the British people. As a matter of fact, he was only waiting for a decisive opportunity to sweep from the Sahara upon Egypt and the Sudan, with his ally the Sultan of Darfur, when the Turks were ready to renew their advance from Palestine against the Suez Canal.

In the end a slight incident moved him to act. In November, 1915, a U-boat sunk the British steamer





THE MOVING LINE ACROSS THE DESERT SANDS

Tara, landed the survivors in Sollum Bay, in the extreme western corner of Egypt, where they became prisoners of the Senussi, and brought in a Turkish vessel, containing two hundred Turks, a few German officers, and some ammunition. This dashing little exploit was sufficient to convince Ahmed and his followers that the British Navy was destroyed and that Germany ruled the waves. He attacked the British outpost at Sollum Bay, and, when the small British force retired to Matruh, pursued it with thousands of excited Bedouin and Senussi troops. All the tribes for fifty miles along the coast rose and joined the prophet warrior.

It was one of the decisive crises in the history of the world, though few in Great Britain knew what was happening out on the edge of the Sahara Desert. The Senussi was a veritable descendant of Mohammed, glorified by his successes against the Italians, supported by the Ottoman Khalif, and leagued with the Red Kaiser of Berlin. The British retirement was bringing tens of thousands of Arabs and Berbers to his banner, for the hungry desert wanderers began to think that the looting of Cairo and Alexandria, and the ravaging of the granaries along the Nile, would prove an easy enterprise. Then, swollen to as great a host as the ancient Saracen army, they intended to break once more upon the civilised world.

There was only one immediate obstacle to their rushing movement. They wanted food. Now, the country behind the little Egyptian port of Matruh was a splendid barley-growing district. From this region the desert tribes obtained their corn by exchanging dates. Now they had no

dates to exchange, needing them as food supplies, but they required the Matruh barley to keep them until Egypt was conquered. All this had been foreseen by General Maxwell, commanding the British forces in Egypt, and this was the reason why he retired his Sollum outpost to Matruh. He was able to test the professions of friendship of the Senussi, and submit the fanatic Bedouin to an ordeal of temptation, by pretending to be weak, yet holding on to the barley country.

The Senussi appears to have seen that his general was about to make a premature movement. The Turks were not ready to resume the attack on the Suez Canal, and the Sultan of Darfur was not prepared to advance on Khartum. But the appetite of the Bedouin for barley and the loot of Egypt could not be restrained, and on Christmas Day in 1915 the struggle opened in the barley country, with a battle between a strange assortment of races. A force of untried New Zealanders, who were finishing their training by the Pyramids, had been hastily brought into the desert, and they charged on foot, alongside a warthy, turbaned battalion of Sikhs, who were masters in the art of hill warfare. Cattle-riders from Australian ranches rode with English yeoman farmers, galloping out to the uncharted wilderness in the darkness of early morning to make a surprise cavalry movement against the enemy's rear.

In the opposing army were thousands of Bedouins in white robes, the Senussi troops in uniform, the Turkish soldiery with German officers, Turkish commanders, and a few naval gunners. On both sides the forces were remarkably small in proportion to the

THE BATTLE OF THE MOTOR-CARS

greatness of the issue, because of the difficulty of water supply. The Senussi could probably have collected a hundred thousand men, but they would have died of thirst. In the ridges south of Matruh there was water only for three thousand men.

The Senussi was overwhelmed by a series of surprises. His men were first frightened by British flying machines that directed the long-range guns of a warship upon the hostile positions. Then they were routed by a charging squadron of armoured motor-cars.

The children of the desert were peculiarly subject to scientific impressions. They had been won over by the marvels of the U-boat, in which some of their chief men had been taken to Trieste to admire the wonder-working power of "Hadji Wilhelm." In their fantastic way they had grafted the modern fairy tales of science on to the old enchantments of the Arabian Nights Entertainment, and they expected all the new wizardry of warlike power to be exerted on their behalf. When, therefore, they were bombed from the blazing tropic sky and assailed by steel monsters shooting out fire and a stream of bullets and moving faster than any Arab racehorse, they fled like frightened children. The measure of the intellectual standard of the race was at last tending to become the measure of their military power. The Senussi and his men were probably not inferior in native courage, audacity, and strength of character to the Khalif Omar and the Arab

clans who broke the world into fragments after the death of Mohammed. They were mostly men of the same stock as the Saracens, tempered in body and trained in sense and feeling by the same hard desert life, and fiercely quickened by a similar religious exaltation. Their missionary work among African pagan tribes had been magnificent, and in the Middle Ages they might have reformed their own faith by the power of the sword.

But they were ignorant of the new ways of controlling natural forces. They could not smelt the iron in their hills and make modern instruments of industry from it. Opposing them were men who could fly faster than the eagle, run quicker than the horse, and swim with more power than the fish. Supplied by motor-boats and steam-vessels along the shore, and by motor-lorries inland, the small but well-equipped British forces won the battle of Matruh with remarkably slight loss to themselves, and, driving the Senussi army from the barley-fields, wore it down in a long pursuit across the bare ridges and hot sands of the desert.

Two further pitched battles were fought under curious circumstances. On January 21, 1916, there was an action round a well, 25 miles west of Matruh. The Senussi's force was veiled by a dancing mirage, and the British gunners could not see anything to fire at. In these strange circumstances, the five hundred Australian and English cavalymen waited until the enemy pressed them, and then



THE ARMOURD CARS WHICH TERRIFIED THE SENUSSI AND WON THE FINAL BATTLE

THE CHILDREN'S TREASURE-HOUSE

galloped away in apparent confusion. The Bedouins, excited by their victory, surged forward in masses, but as they rushed on beyond the zone of the mirage they were swept by a tempest of shrapnel. Many of them fled, breaking away from the new Mahdi because he did not work any of the warlike wonders he had promised.

Again, on February 26, 1916, the Sahara mirage played an important part in a modern action. The Senussi's army was pursued by a small light column of South Africans, Dorset Yeomen, and Australian camel-

many tribesmen who had deserted him, he was stronger than he had been in previous battles. The sun was hot, and on the enemy's flank, where a long valley intervened between the ridge position, the scorched sand made the air dance and waver. The trained eye of General Lukin saw what could be done with the heat mirage. He ordered the Dorset Yeomanry to charge across the valley against the thousands of well-entrenched and well-armed Bedouin, Turkish, and Senussi troops. It appeared as if the Dorset troopers were riding to their death,



THE MYSTERY OF THE DESERT

riders, under General Lukin, who had fought in the waterless wastes of German East Africa, under General Botha, and knew all there was to know about desert warfare. Strengthened by an armoured-car squadron under the Duke of Westminster, and helped by scouting pilots on aeroplanes, General Lukin found the discomfited warrior prophet holding a ridge at Agagia, eighty miles from Matruh.

The Senussi had been able to collect many thousands more men as he retired towards the scene of his successes in Tripoli, and, in spite of the

but their enemies, blinded by the mirage, could not hit them. The Dorset farmers broke through the Senussi's regular troops, captured his Turkish commander-in-chief, killed or took his staff, and scattered his army in panic flight. The fugitive enemy fled so fast that he could not be overtaken in a waterless country.

But although all infantry and cavalry pursuit ceased on March 14, 1916, when General Lukin's column reached Sollum Bay, the struggle had a surprising end. With only 32 men, the Duke of Westminster outraced and

THE BATTLE OF THE MOTOR-CARS

routed six thousand Senussi, Bedouins, Turks, and Germans. This apparent miracle was produced by setting the 32 men and their leader in nine armoured motor-cars and one ordinary touring car, and sending them down the old Roman road that begins in the desert and runs to the Tripoli coast.

The road was worn rocky with the traffic of ages, but it seemed to the motor-car men a perfect track after the desert sand. They worked their cars up to a speed of 35 miles an hour, which was lightning travel in the Sahara, and in little more than half an hour the army of the Senussi was

while the others stood still for the moment and swept all the ground with machine-gun fire.

There then followed an extraordinary spectacle. To the Bedouin, the Rolls-Royce cars, with their terrible rain of death, were not human methods of warfare, but ghastly instruments of magic that nothing could resist. The Arabs made no attempt at resistance; they fled, casting away their rifles and equipment, and only fear of a shortage of petrol, at the end of a seven-mile chase, compelled the Duke of Westminster to desist from trying to round up Senussi and all his army.



THE FIGHT WITH THE SENUSSI IN THE BARLEY-GROWING DISTRICT OF MATRUH, NEAR SOLLUM BAY

caught up, preparing to break camp at Asisa wells in Tripoli. The camel train was loaded, some guns had been removed from their positions, and only one cannon and two machine guns protected the rear.

Round a bend of the road swung the duke and his ten motor-cars. Under fire from the solitary Turkish gun and the two Maxims, he formed a charging line of eight cars, leaving two cars on the road to act as a covering force. Over a stretch of three hundred yards of boulders and sand the eight cars worked, each car in turn making a short rush forward

All the guns, machine guns, ammunition, and supplies of the enemy were captured, the only British casualty being one officer slightly wounded.

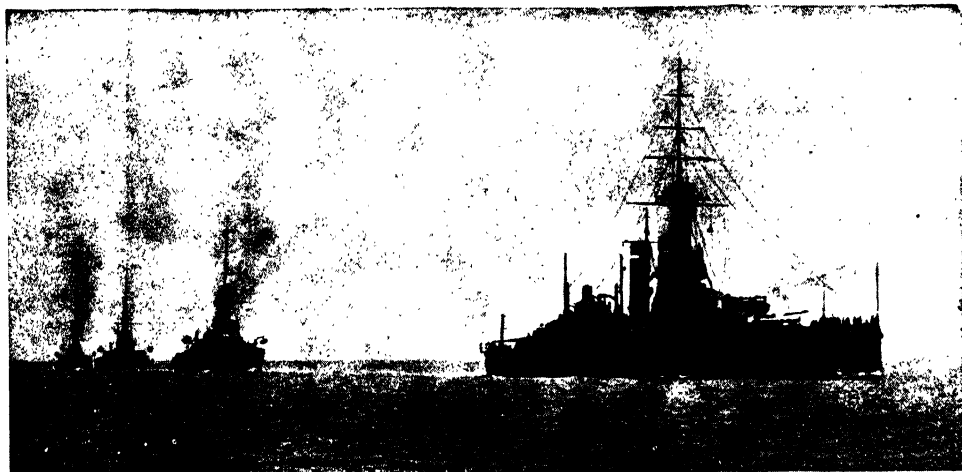
Thus, without the loss of a single man, 33 Britons not only defeated but wildly routed six thousand enemies.

When more petrol was obtained, the duke continued his pursuit, scattered the Senussi once more, and rescued the survivors of the crew of the Tara. The Senussi's forces broke up, the starving Bedouins came in and surrendered, while the discredited Mahdi retreated to his remote oasis, with a tragic, angry remnant of his army.

THE BRITISH ARMADA AROUND OUR HOMES



THE BRITISH FLEET PATROLLING THE NORTH SEA



A BATTLE SQUADRON—THE FLOATING FORTS OF OUR ISLAND HOME



THE IRON DUKE THAT WOULD LET NO ENEMY'S SHIP LIVE WITHIN RANGE OF ITS MIGHTY GUNS

THE FLEET THAT SAVED THE WORLD

THE greatest naval battle in the history of the world was fought in silence on the twenty-first of November in the Year of Victory nineteen hundred and eighteen. In all the annals of the human race there has been no more astounding sight than this.

WHEN God wants a hard thing done, said Milton, He tells it to His Englishman. It was not an accident that Englishmen loved the sea and freedom too. Because our men loved freedom and the sea they were to save the world. Freedom must hold the mastery of the seas; a tyrant with sea-power could banish liberty from the earth for ages yet.

FOR a generation the British people were building up this fleet against which tyrants should hurl themselves in vain. No man can say how heavily these islands paid for this insurance of the freedom of the human race. We sacrificed our education, our homes, the health of our poor, and the comfort of our old people, to build up this power that was to guard the world in the wild hour coming on.

THERE it stood through these four red years, the greatest material concentration of knowledge and power ever known for good or evil. It kept the seas free for all mankind. Against it the shadow of the steel god crept across the North Sea, but the sinister force that was to shatter the Grand Fleet stayed in its harbours.

AND then it came out, drawn as to a magnet by the moral power of the Grand Fleet that it dare not contradict. This proud fleet built to shatter freedom came out of its German ports and sailed into a prison. It was the end of an evil German dream to overturn the world. Here the great story of the Fleet is told by Mr. Archibald Hurd, who knows it well, and has seen it many times during its unceasing vigil in the cold North Sea.

The Story of a Silent and Bloodless Trafalgar

WHEN in years to come men ask what was the greatest victory ever won by the British Fleet, the answer will be "The battle of the North Sea of November 21, 1918." Not a gun was fired, not a torpedo left its white line of menace on the surface of the water, not a life was lost; but the cream of the German Navy, in charge of caretakers, was surrendered to Admiral Beatty, representing the great democracies of the world, who in past years owed their freedom to the influence of British sea-power.

It was fitting that the Grand Fleet should have included among its crews seamen from Canada, Australia, New Zealand, South Africa, and Newfoundland; and it was appropriate that one of its battle squadrons should have flown the Stars and Stripes, and that the French Navy should have been represented by a battleship and two

destroyers, for France could not have achieved her destiny unless the British Fleet in bygone years had broken the power of Napoleon.

This surrender of all the most powerful vessels under the German ensign was a unique pageant, marking the defeat of German naval ambitions. The event would have lacked its full measure of poetic justice if the German Kaiser, a fugitive in Holland, and Grand Admiral von Tirpitz, seeking seclusion and safety in retirement, had not lived to learn of this triumph of right over might. These two men, wielding almost unlimited influence over German naval affairs, had made a bid for sea-power in order that Germany might obtain dominion over the whole world, her navy and army constituting mailed fists to be employed with merciless rigour in subjugating humanity to Germany's

THE CHILDREN'S TREASURE HOUSE

intolerant will. The details of the act of surrender are of small importance ; what does matter is that it symbolised the overthrow of autocratic militarism, with its long catalogue of crime.

IT pleased our enemies to think of the British Navy as a thing of menace, but the British Fleet has been the beneficent agent in freeing the seas, and in planting freedom in the outermost parts of the world. On Sundays, when the Liturgy is sung in church, two suffrages serve as reminders of an incident in the Navy's history. When Henry the Eighth was on his throne an enemy invaded Spithead. The British Fleet was hopelessly weak, and it seemed inevitable that it should be overwhelmed. But a contrary wind sprang up in the night, and in the morning the foreign fleet had disappeared. The deliverance was so unaccountable by any ordinary human reasoning that it was determined to incorporate in the Liturgy these words, which have since become familiar throughout the English-speaking world:

Give peace in our time, O Lord,
and the response,

Because there is none other that fighteth for us, but only Thou, O God.

During the reign of Queen Elizabeth, Henry's daughter, the faith of British seamen was put to its severest test. They belonged to a country with a small population, little wealth, a small fleet, and hardly any army. Who were they to throw down a challenge to the great and terrible Philip ?

Portugal claimed unrestricted sway over the Indian Ocean and the Atlantic south of Morocco ; and Spain, the dominant Power of the world under Philip the Second, asserted dominion over the Pacific and the Gulf of Mexico. When the Spanish Ambassador protested to Elizabeth against Drake's impudence in invading the Spanish Main, Elizabeth replied haughtily : " Tell your royal master that a title to the ocean cannot belong to any people or private persons, forasmuch as neither Nature nor public use nor custom permitteth any possession thereof." The great

seamen of that Golden Age supported their queen's proud declaration of the freedom of the seas. Their daring, courage, and seaman-like skill, and their belief in the justice of their cause, enabled them to triumph.

IF we would understand the spirit in which these men fought, we may turn to the letters in which their minds and hearts were reflected. Drake, writing from his ship in May, 1587, declared : " If we can thoroughly believe that this which we do is in defence of our religion and country, no doubt but our merciful God, for His Christ our Saviour's sake, is able and will give us victory although our sins be red. God give us grace we may fear Him, and daily call upon Him." And was it not old John Hawkins who told the statesmen of that time : " We have to choose either a dishonourable and uncertain peace, or to put on virtuous and valiant minds, to make a way through such a settled war as may bring forth and command a quiet peace " ? In that temper the British Navy won for humanity the freedom of the seas ; and the freedom of the seas carried with it a larger freedom, for the sea controls the land.

Glance into the cabin of the Victory on the eve of the battle of Trafalgar. Nelson is on his knees, writing in his diary words which have since been an inspiration not to British seamen only :

May the great God whom I worship grant to my country, and for the benefit of Europe in general, a great and glorious victory ; and may no misconduct in anyone tarnish it ; and may humanity after victory be the predominant feature in the English Fleet !

For myself, I commit my life to Him who made me, and may His blessing light upon my endeavours for serving my country faithfully ! To Him I resign myself, and the just cause which is entrusted to me to defend. Amen.

As Nelson, almost blind from the wound he had received, busied himself after the battle of the Nile in rescuing enemy sailors from drowning, so Collingwood, after Nelson's death in the battle of Trafalgar, sent out boats to pick up the unfortunate Frenchmen struggling for life in the

THE MAGNET



AS BY A MIGHTY MAGNET, THE GERMAN SHIPS WERE DRAWN FROM THEIR HIDING INTO THE ARMS OF THE GRAND FLEET

THE COAL THAT MAKES THE SHIP GO



Life on a battleship to-day is very different from what it was in Nelson's time. Then the seaman had to be a real sailor, and know how to manipulate sails, and so on. Now a warship is a huge floating machine, and every seaman is a mechanic. Before the ship can move it must take in thousands of tons of coal, as is being done here.



The coal is swung on board by a crane, as shown in the top picture, from the quay, or from a coaling vessel which comes alongside the warship, and then the sacks are quickly unhooked by the men, as seen here, and carried away.

CLEANING THE SHIP AFTER COALING DAY



Coaling a warship is a very dirty task. The men get like negroes, and every part of the deck is covered with a fine coating of coal-dust, and has to be thoroughly cleaned. Here we see the men washing down the funnel and masts.



An army of men wash down the decks, scrubbing the boards again and again until they shine like a kitchen table that has never been used. Nowhere in the world are floors kept more spotlessly clean than on a great warship.

THE CHILDREN'S TREASURE HOUSE

water. The traditions of Drake, Hawkins, and Nelson were still preserved untarnished in the British Fleet when Germany determined to seize for her despotic ends the trident we had wielded for the benefit of the human race. We had suppressed the slave trade; we had punished the head-hunting Dyaks; we had put down piracy; we had thus enforced a real freedom of the seas, enabling merchants of all nations to go about their business without fear. If it had not been for the British Fleet, the United States, the most populous and prosperous democracy in the world, might never have existed, and Canada might have been under the heel of some autocratic power. Admiral Mahan, the American historian of sea-power, asked and answered a question:

Why do English political conceptions of representative government, of the balance of law and liberty, prevail in America from the Arctic Circle to the Gulf of Mexico, from the Atlantic to the Pacific?

Because the command of the sea at the decisive era belonged to Great Britain.

And Admiral Mahan, thinking of the sea-power of America's motherland, was led to ask and answer another interesting question:

What, at the moment the Monroe doctrine was proclaimed, insured immunity from foreign oppression of the Spanish-American colonies in their struggle for independence?

The command of the sea by Great Britain, backed by the feeble navy, but the imposing strategic position, of the United States.

The admiral might have gone farther. He might have inquired how Greece achieved her independence; how Portugal and Spain were saved from national extinction; how Italy was united in bonds of freedom; how the little States of Northern Europe were preserved to work out their own destinies. Wherever we look, on sea and on land, we may trace the influence the British Navy has exercised in spreading those liberal ideals and institutions which first found root in this sea-encompassed England, which Alfred, Henry the Eighth, and Queen Elizabeth saved for posterity.

Ours is a sea-nation, and that is why we are what we are:

Time, and the ocean, and some fostering star
In high cabal have made us what we are,
Who stretch one hand to Huron's bearded
plain,

And one on Kashmir's snowy shoulder lay—
And round the streaming of whose raiment
shines

The iris of the Australasian spray.

WHEN William the Second became King of Prussia and German Emperor, it was hoped that, as he had had an English mother and had run about Portsmouth Dockyard as a boy, he would understand the mission of the British Fleet and be anxious to support it. Germany at that time had only a small navy, and German interests abroad, like those of other nations, were protected by British men-of-war. There had never been any foreigners in the British Fleet, but Queen Victoria made the Kaiser an honorary Admiral of the Fleet, thus conferring on him the highest honour at her disposal. The Kaiser showed his gratitude by returning home to plan a German Navy to supersede our own.

At first the Germans laughed at him, remembering that Bismarck had always warned them of the danger of antagonising the great sea Power which protected liberal institutions throughout the world; but the young Kaiser was determined to have his way. When the Reichstag rejected his early plans, he speedily dismissed the Minister for the Navy; and then, by ill fortune, his eye lighted on Admiral von Tirpitz, an ambitious sailor, with a gift of speaking, who thought he was qualified to become a statesman. The Emperor and the admiral set to work to influence the newspapers, and thus to bend the public opinion of the German Empire to their will. In 1900 the first Navy Act passed the Reichstag and was signed by this new Admiral of the British Fleet, to whom Queen Victoria had presented the bâton.

There could be no doubt as to the meaning of this measure. Lord Fisher,

THE FLEET THAT SAVED THE WORLD

far away in the Mediterranean, realised it, and began to prepare counter-plans, which he was to carry out as First Sea Lord and the creator of the Grand Fleet. The Emperor announced that he intended to do for the German Navy what his grandfather had done for the German Army ; the German mailed fist was to be as powerful by sea as by land, and thus the German Army was to obtain length of reach so that no country in the world would be free from its menace. This Navy Act contained an actual challenge to the British Fleet, for it was accompanied by a Memorandum, in which it was declared that "Germany must have a battle fleet so strong that even for the adversary with the greatest sea-power a war against it would involve such dangers as to imperil his position in the world." The German Fleet, in other words, was to be so strong that the British Fleet dare not face it. One Navy Act followed another in quick succession, each providing more ships and more men. All the time the Kaiser was making speeches to his subjects and sending men-of-war into the outer seas to remind distant peoples of the growing power of Germany.

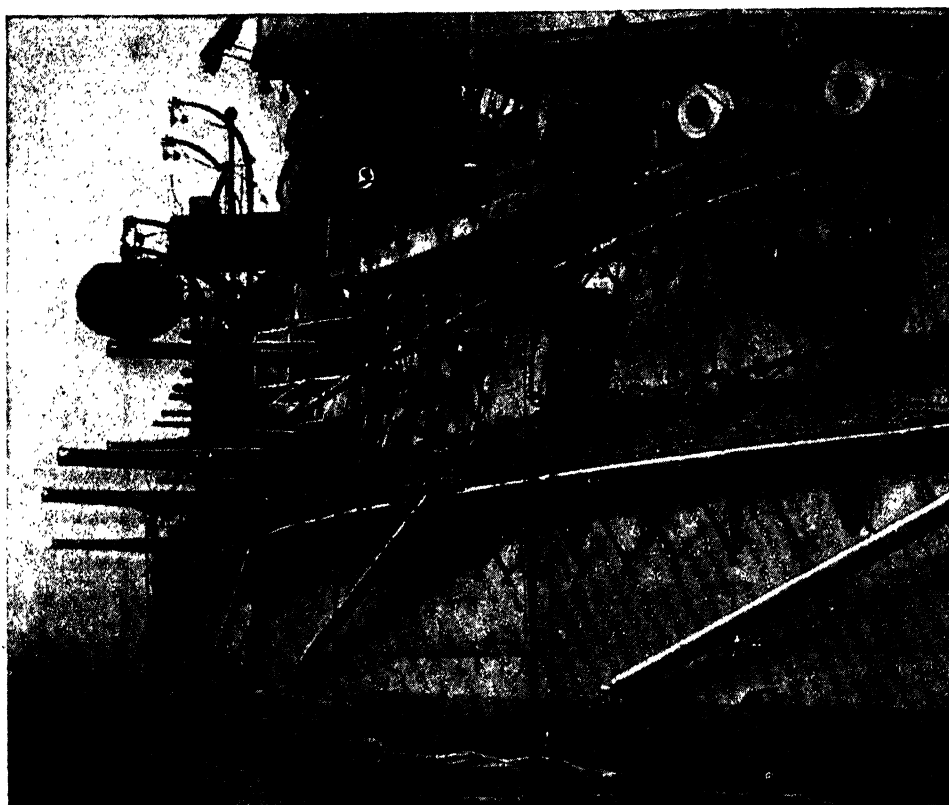
ALMOST the youngest of us can remember the naval crisis of 1909, when the Board of Admiralty decided that it was necessary to lay down eight Dreadnoughts, besides a number of other ships, in order to maintain the superiority of the British Fleet. Many people still hoped that Germany would relent, and the Board of Admiralty had to resign in order to get its way. If anything could have convinced the Kaiser and his Ministers that the British people were determined to hold their own by sea, this incident should have done so ; but what actually happened was that Germany prepared to pass another German Navy Act, further increasing the number of officers and men. It then became apparent that Germany was deliberately threatening to rob us of our birth-right. By this time the Kaiser made little or no secret of his ambi-

tions, and hundreds of writers and speakers throughout Germany were inspired to support the naval movement by depreciating the British Navy. Once Germany had obtained command of the sea, they pointed out, the world would be at her feet.

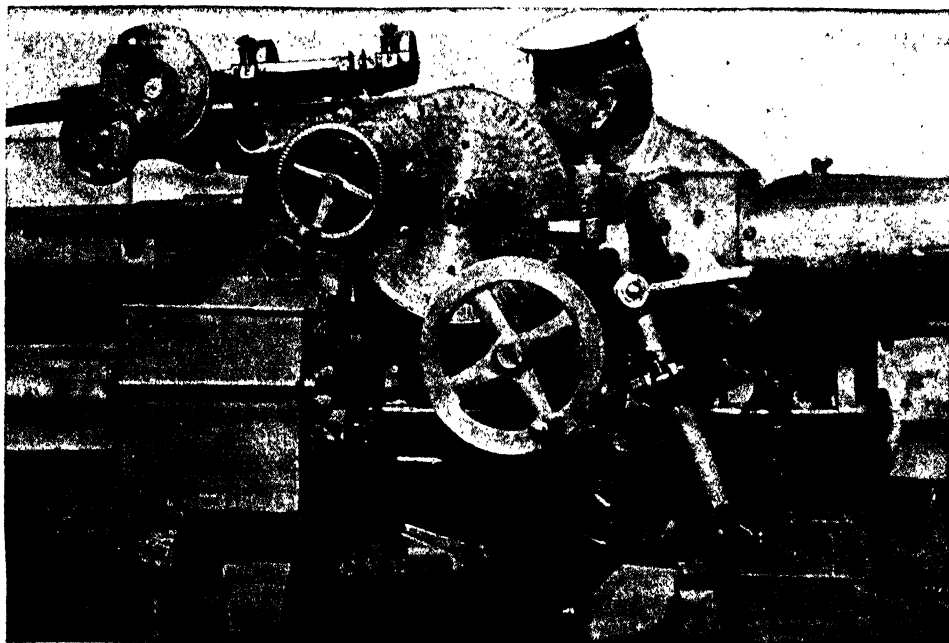
And then the war came. We know that the German Emperor and his Ministers believed that we should be so frightened by the German Fleet—which by that time was stronger than the combined navies of France, Russia, and Italy—that, like cowards, we should hesitate to intervene on behalf of Belgium and France. A few weeks' delay on the part of the British Government and the issue would have been decided, so important is time in war. It needed some courage for British statesmen to decide that it were better that the British Empire should go down in ruins rather than that the British people should stand by and see the forces of Autocracy triumph in Europe. They realised that if Germany won on the Continent she would next strike at the British Empire, and afterwards at the United States, and that all the ideals the English-speaking world had inherited would thus be defeated. Our declaration of war was perhaps the finest act in our long history, and no nation without faith in its mission in the world would have dared to throw down the challenge. We had only a small army, but we had faith in the Fleet, and faith that right would triumph over might.

So the greatest war in history opened, the Grand Fleet taking up its war station in the northern mists, and other squadrons being flung out on the great oceans to protect the streams of ships bringing food and materials and munitions of war. From the very day war was declared, the Grand Fleet held the German Fleet as in a vice. One of the glories of the long and terrible struggle was the way in which the people of the great Dominions realised that the Grand Fleet, keeping watch and ward in the North Sea, *a mere pin's point on*

THE GUNS THAT GUARD OUR ISLAND HOME

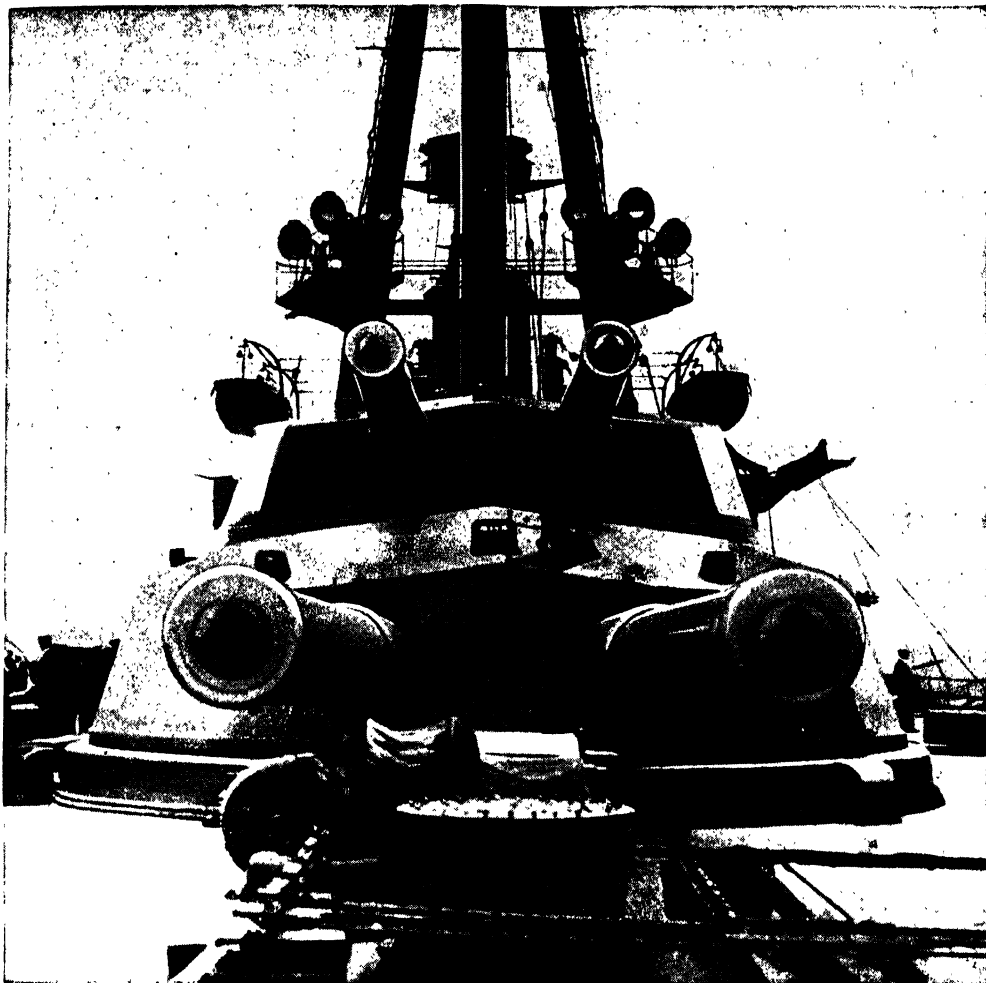


READY! AYE, READY! THE BROADSIDE OF A BATTLESHIP



THE MAN AT THE GUN

THE GUNS THAT FIRE ONLY FOR FREEDOM



LIGHT AND DEATH—THE GREAT GUNS AND TRIPLE SEARCHLIGHTS OF H.M.S. NEPTUNE



THE MIGHTY GUNS OF THE ORION, ONE OF THE GREATEST SHIPS AFLOAT

THE CHILDREN'S TREASURE HOUSE

any chart of the world, was really defending not the North Sea and the English Channel only but Canada and Australia and every sea. Australia had started a navy of her own; the battle-cruiser Australia and other Australian ships were incorporated in the Grand Fleet. Canada and New Zealand had built two great and powerful ships, which also joined the Grand Fleet; the Malay States made a contribution of another battleship; Canada, Newfoundland, and South Africa hastened to send sailors to the same great force which, inheriting the naval tradition of centuries, became the main defence not only of the British Empire but of the armies and the civil population of all the Allies.

It may be said—it was said by the German delegates who met Marshal Foch—that the German Fleet has not been beaten, that no decisive naval battle has been fought. Well, there are many kinds of battles. We all, even those of us who have no rifles, are fighting battles every day, and there are decisive battles of which the character may pass unrealised. Viewed from the point of view of the man who believes in force as the ultimate factor in human affairs, the battle of Jutland was a decisive battle. The Germans were not annihilated, but, then, the British Navy in its long history has never annihilated an enemy's fleet.

It is true the Germans managed to get back to their harbours with most of their ships, but they never dared to risk another naval action, not so much because the Grand Fleet was the stronger fleet as because they knew that it was supported by a moral force which they could not overcome. If naval material—ships, guns, and torpedoes—were as all-important as the Germans once professed to believe, the odds against them were not such as would have kept them hiding in their ports month after month. If we could have looked into the hearts of the German sailors in those days, we should have learned that the secret of their inactivity was the knowledge that they were opposed not merely by

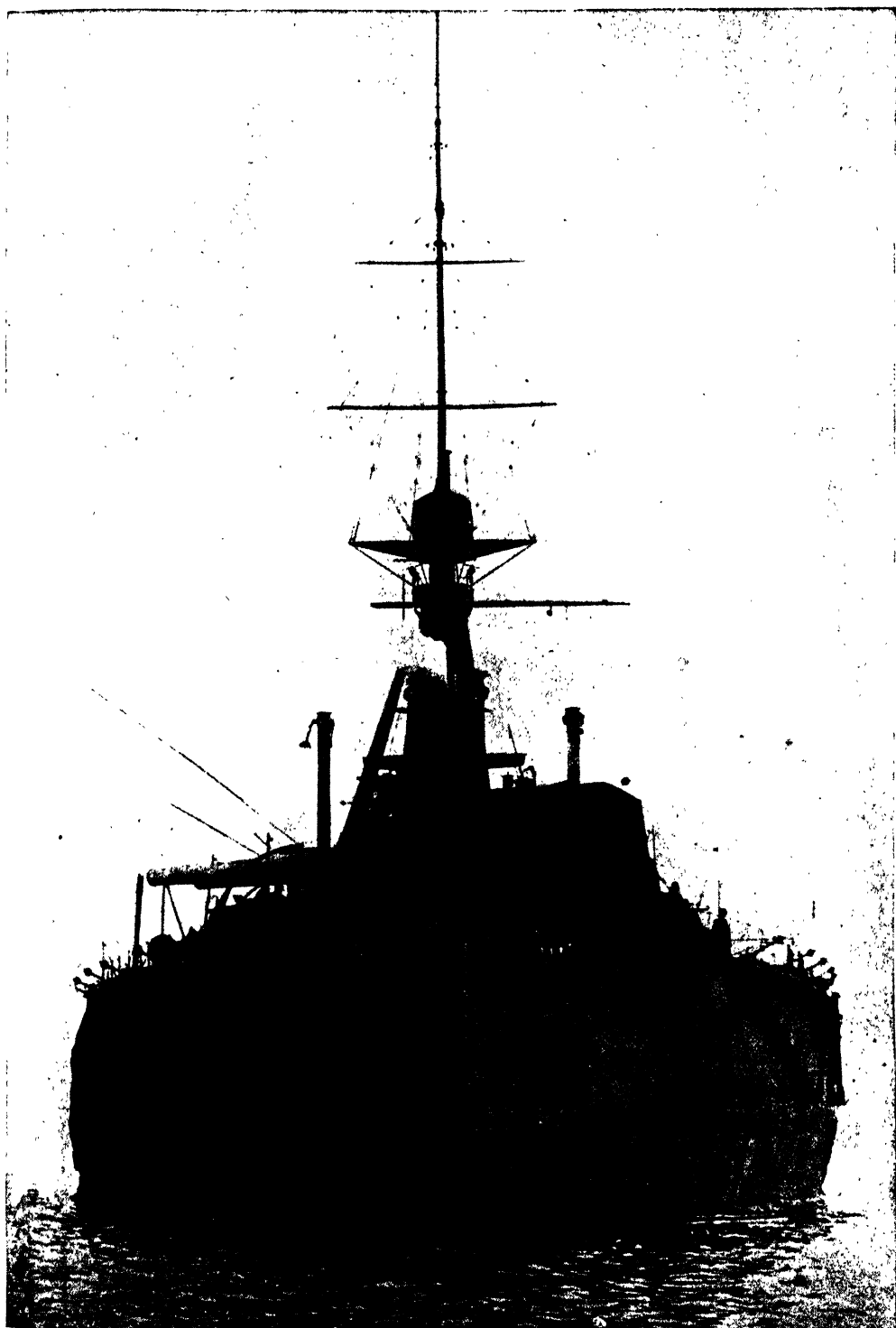
superior force but by all the cherished traditions of the sea, its high chivalry, and the incalculable moral strength supporting British sea-power.

The Kaiser, when he first came to the throne, had boasted that "the British Navy is for the German Navy not only a model of technical and scientific perfection, but its heroes, too, have always been, and will always be, the guiding stars of German officers and men." Those words, as every German seaman knew, had been denied in a thousand acts dictated by the German High Command, caring for nothing but the selfish triumph of Germany. Those seamen who were supposed to regard Nelson as their great exemplar had become the pirates of the twentieth century, sinking peaceful ships without warning, and leaving thousands of defenceless men and women and children to face death under the most agonising circumstances. The death-roll of this infamous campaign of piracy had already mounted to 17,000 by the autumn of 1918, embracing not only men but women and little children.

THE acid of sea-power as the instrument of humanity had already eaten deep into the German Empire when, humiliated and defeated, the greater portion of the German Fleet—its newest, most powerful, and swiftest ships—issued from its ports to surrender. That day witnessed the greatest decisive battle every fought by sea—greater than the defeat of the Spanish Armada, than the battle of the Nile, than Trafalgar, or Jutland, or the Falkland Islands. For this battle represented the triumph of outraged humanity over force, wielded by soulless men with no object in life except the triumph of their selfish purposes.

Liberty, to spread eventually over the seas to distant lands, had built up the British Fleet for its protection; Autocracy, in its insolent pride, had created the German Fleet to defeat it. When at last the great day dawned, and Germany set in motion the huge military and naval organisations she had nourished for a generation, the

THE STEEL WALLS OF OLD ENGLAND



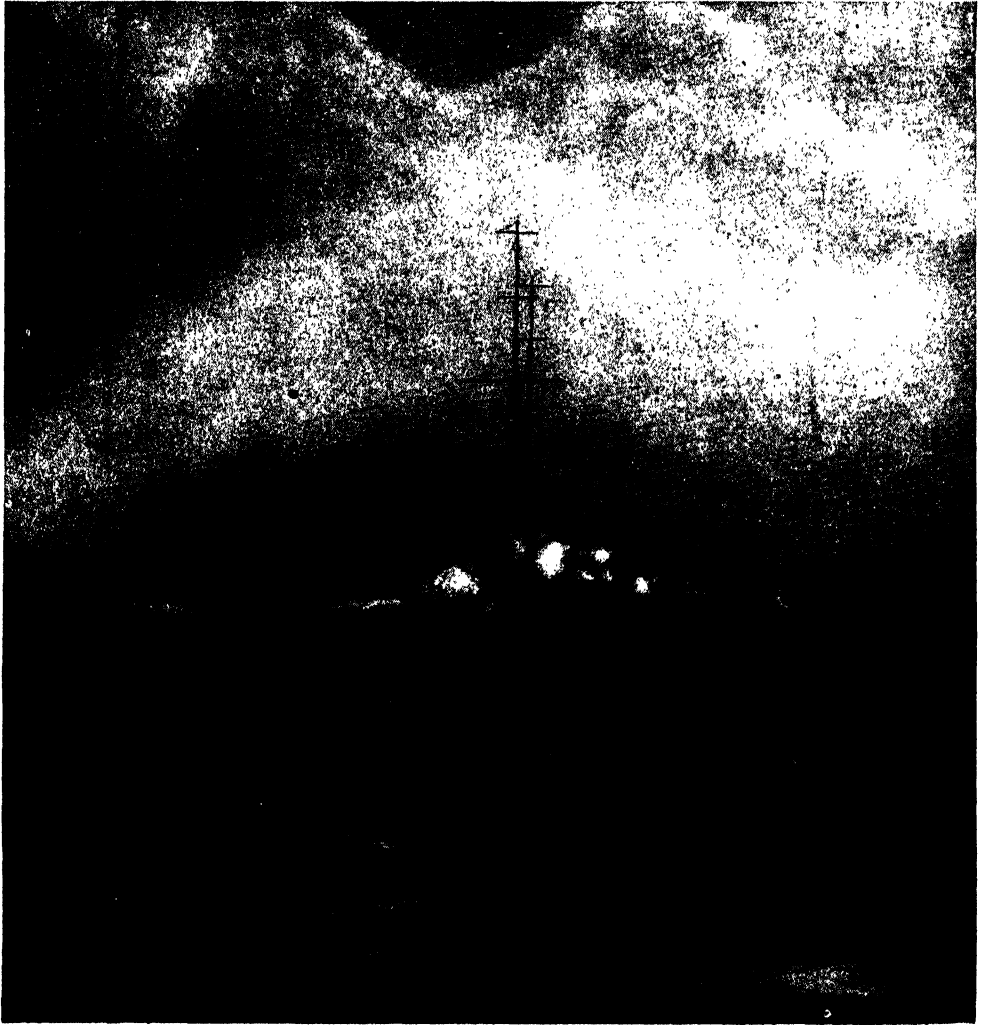
THE ORION, ONE OF THE MOST POWERFUL SHIPS ON THE SEA, WHICH CAN THROW A BROADSIDE OF EXPLOSIVES WITH POWER ENOUGH TO RAISE 700,000 TONS A FOOT HIGH

THE CHILDREN'S TREASURE HOUSE

British Fleet, never sleeping, took up its traditional rôle as the defender of the freedom of the seas. And on November 21, 1918, Admiral Beatty's vast armada was so powerful and so supreme, drawing its strength from the glorious annals of a thousand years, that the autocratic navy which was to have wrested the trident from the British Fleet was destroyed without a blow being struck.

In the great sea annals of the British people there has been no event to compare with this sailing out from German ports of all those battle-ships, battle-cruisers, light cruisers, destroyers, and submarines in charge

of caretakers. It symbolised not so much the triumph of British sea-power as the vindication of those great and enduring principles for which millions of men, hazarding their lives, have made the great sacrifice, in the assurance that though they died the issue was in no doubt. For, though history repeats itself, the hands of the clock are never really put back. We may imagine that the spirits of the great British seamen who fought for freedom in the past saluted the ships of the Grand Fleet that day, in recognition of a greater victory than any they had achieved, the greatest victory yet, the bloodless Trafalgar of humanity.



GUARDING THE SEAS

DRAKES & RALEIGHS OF THE SKIES

Fifty Thousand Battles in the Air

FOUR hundred years ago Drake and Raleigh and Philip Sidney, and all that gallant band of English seamen, were building up the great tradition that will stir an English heart while England lasts. They sailed out into unknown seas, they went through fire and storm and death, they conquered everywhere in their wind-tossed boats.

A few years ago the Drakes and Raleighs and Sidneys of another unknown world were building up their great tradition. They went out in their little aeroplanes and mounted to the clouds. They sat up there like specks and watched the mighty conflict of the armies on the battlefields of Europe. They swooped down to the fields and played their part below. They rose again and fought their dauntless fights at heights to which the lark has never soared, and when the war was over the pilots in our British 'planes alone had fought hardly less than fifty thousand battles in the air.

HAD so many battles ever been fought in the world before, in all its history of ten thousand years? Never, surely, such battles as these, greeting the terrible dawn of the greatest age in the life of man, the Age of Flight.

Let us look at the things these heroes did, these Drakes and Raleighs of our modern days.

The Rise of Our Air Heroes

SINCE Drake with his little ships scattered and shattered the galleons of Spain, there is only one achievement in our history that can be compared with the destruction of the Armada. It is the rise to power of the air heroes of Great Britain.

When our soldiers crossed to France in August, 1914, they had only fifty flying machines, while the Germans had a fleet of gigantic airships and a great force of aeroplanes, with the best engines in the world and many special devices. Their machines flew over our lines at heights to which our pilots could not climb, and they had more speed and more staying power.

Drake was unable to sink the Spanish fleet because he ran out of gunpowder; Queen Elizabeth had plenty of powder but she would not give it to her seamen. Our air fighters suffered in the same way. They had no good airships, and only inferior flying machines that could only make short flights, while none of their engines was as good as the German

engines. There were English firms making better machines than Germany's, but this source of fighting power was used like Queen Elizabeth's gunpowder, with a miserly reluctance. It was not until the British people were appalled by their losses in the air that measures were at last taken to utilise the fullest resources of the country in development of a great air fleet.

Yet the spirit of our race triumphed over all difficulties, as in the days of Drake. By his skill and fighting audacity the flying Briton spread terror through German aerodromes, and maintained a personal ascendancy while his Government was providing him with an adequate weapon. In the end he achieved supremacy in the skies as our sailors had achieved it on sea. He fired the aerial galleons of Germany, turned the raiding expeditions from London and the English coast, and made his own bombing 'planes; and his flying over the Rhineland was one of the chief causes of the German revolution that put an

THE CHILDREN'S TREASURE HOUSE

end to the war. The full story of the adventurers cannot yet be told. The record of them still lies in the books of the British Staff. Yet enough has already

been revealed to show that the achievement of the Georgian aviator may stand in history beside the entrancing story of the Elizabethan seaman.

The Pilots who Discovered an Army

The first success in the war was won by Captain Charleton and Lieutenant Conran, who set out from Maubeuge on August 23, 1914, and flew towards the advancing front of the First German Army. The two officers, in their old-fashioned machines, could not fly high, and were shot at by Britons, Germans, and French with furious impartiality, for soldiers then could not tell one machine from another, and they fired at all.

A shrapnel shell burst under the tail of Captain Charleton's machine, half breaking it off and leaving it dangling. The two pilots made remarkably wide flights, in spite of their poor engine-power, and on the roads near Mons they saw a sight filling them with dismay. A mighty grey flood was surging against the British line along the Mons Canal, and General Joffre had informed Sir John French that this force was all Germany could put in the field on the western wing. But the flying Britons saw another hundred thou-

sand Germans flowing like grey rivers towards the towns of Tournai and Valenciennes.

The two pilots could at first scarcely believe their eyes, but in descending to make closer observation they were convinced by the bullets singing through their wings that they had not been mistaken. Over miles of enemy ground, from which rifles, machine-guns, and cannon assailed them, the aerial scouts returned to Maubeuge, and telephoned to Sir John French that a fresh German force was marching round the little British army.

Then it was that the British commander prepared to retreat. As he was completing preparations he heard from General Joffre that the French Staff had made a mistake, and that double the number of Germans originally estimated was trying to envelop and capture the British Expeditionary Force. By this time, however, Sir John was already moving his men towards safety; the British aviators had saved the army.

Flying in a Chariot of Fire

Sergeant Thomas Mottershead was a young man of the stamp of his friend Major McCudden, beside whom he rose by merit into the ranks of the paladins of the air. Had he lived he would have proved one of our finest champions, but he died in an act of endurance that will keep his name glorious in the history of flying.

He was out fighting, with Lieutenant Gower as his observer, when he met the Germans 9000 feet up and was put out of action through his petrol-tank being pierced and set on fire. Sitting behind him, Lieutenant Gower tried to fight the flames, but was unable to subdue them, and, although the brave pilot side-slipped to keep the fire on one side of the machine, the flames reached him and rolled over him.

He could have made a rapid landing, and either put an end to his own sufferings or dashed for a perilous escape. He could also have kept the flames from himself, but they would then have burnt his observer. He resolved to save the young officer.

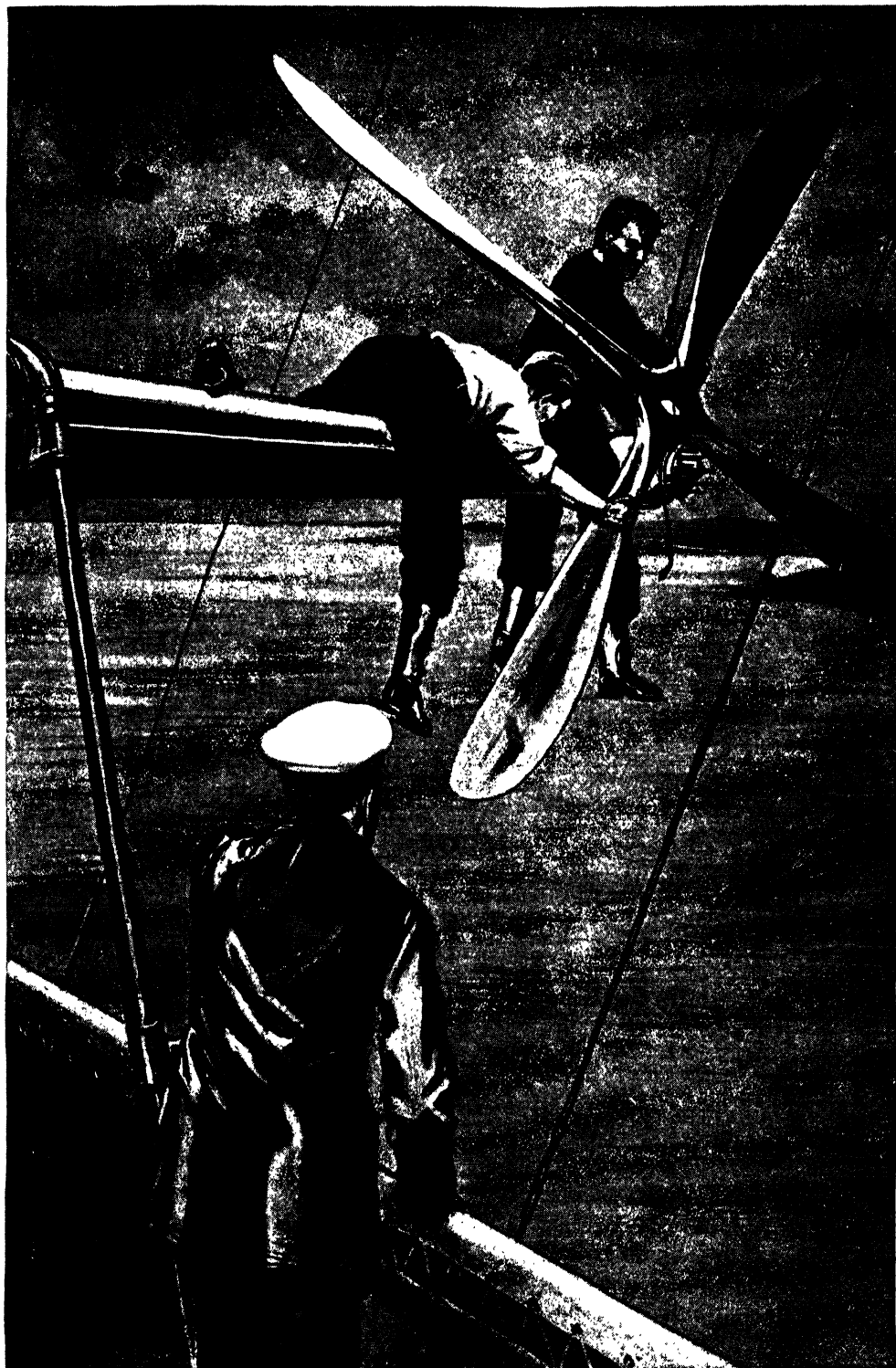
With a clearness of judgment remarkable in a man in such an intensity of pain, he made a long descent in his chariot of fire, bringing his machine safely to the ground as the charred structure was about to break up into pennons of flaming wood. The sergeant was himself pinned beneath the fiery wreck, and died when he was rescued, but by his marvellous endurance and unwavering skill the pilot saved the life of his observer, and set up an immortal standard of self-sacrifice for the new service.

A New Knight of Holy Land

Two Australian flying men, Captain R. M. Smith and Lieutenant A. V. McCann, flying over the Syrian desert behind the broken Turkish army, spied two Germans in a two-seater machine, and, after some brilliant swoops and rushes, forced the

enemy to the ground. Being in their own territory, with thousands of troops around them, the Germans waited in the desert until help came. But they reckoned without the audacity of the Australian airmen. The captain circled round them, shooting

THE INDOMITABLE SPIRIT THAT KNOWS NO FEAR



THE MEN OF THE CLOUDS WHO WILL FIX A NEW PROPELLER IN MID-AIR TO SAVE THE DELAY OF COMING DOWN IN A CRITICAL HOUR FOR THEIR COUNTRY This occurred on a British airship 2000 feet above the North Sea

THE CHILDREN'S TREASURE HOUSE

from his machine-gun, and Lieutenant McCann also got in some bursts of fire. The Germans fled, but the British machine pursued them, and, while keeping them between the sights of his observer's gun, the Australian pilot landed by the abandoned machine. Gathering at a distance, the Turkish soldiers thought it merely another German helping their allies in a difficulty, but Lieutenant McCann continued to cover the enemy pilots with his machine-gun, tell-

ing them he would shoot them if they moved or shouted for help, but would spare them if they remained still. Then the captain broke the petrol-tank of the German machine and set it on fire. When the hostile aeroplane was completely destroyed, the Australian climbed back to his cockpit, started his engine, and soared away, leaving the Germans untouched but dumbfounded, and very angry with the Turkish troops because they had not come to their aid.

Like a Great Dragon-Fly

Along the Piave, Lord Cavan, with his British and Italian divisions, had pierced the Austrian front in one of the greatest military victories in the history of Europe.

Above his advancing army was a cloud of magnificent British airmen, and among these Captain Harry Goode was foremost. After leading an attack against the flying men of Austria, Captain Goode sallied out one afternoon in search of adventure, alone.

Circling over a village where there was an Austrian aerodrome, he saw a crowd of Austrians taking down sheds and removing material and machines. The enemy shot at him, but in a swerving, dodging, aerial dance the young Englishman descended, and staggered every foeman by coming to the ground and careering about the field, half touching the earth with the wheels of his

machine, yet keeping his engine open and darting in unexpected directions at terrifying speed.

It was impossible to shoot him. He rode down one Austrian aeroplane, pitching a bomb into it as he passed, and the only remaining machine he set on fire by firing into its petrol-tank. Then, like a great dragon-fly, with a fiery sting shooting out in front, he routed every Austrian and Hungarian, and drove them in a trailing mob down the village street into the shelter and concealment of the houses. When he turned the nose of his machine upward, after circling round the houses and finding not a soldier visible, he did not leave a fighting man behind him. Out of the village there came only panic-stricken fugitives, who went home as best they could.

The Man Who Fought a Hundred Fights

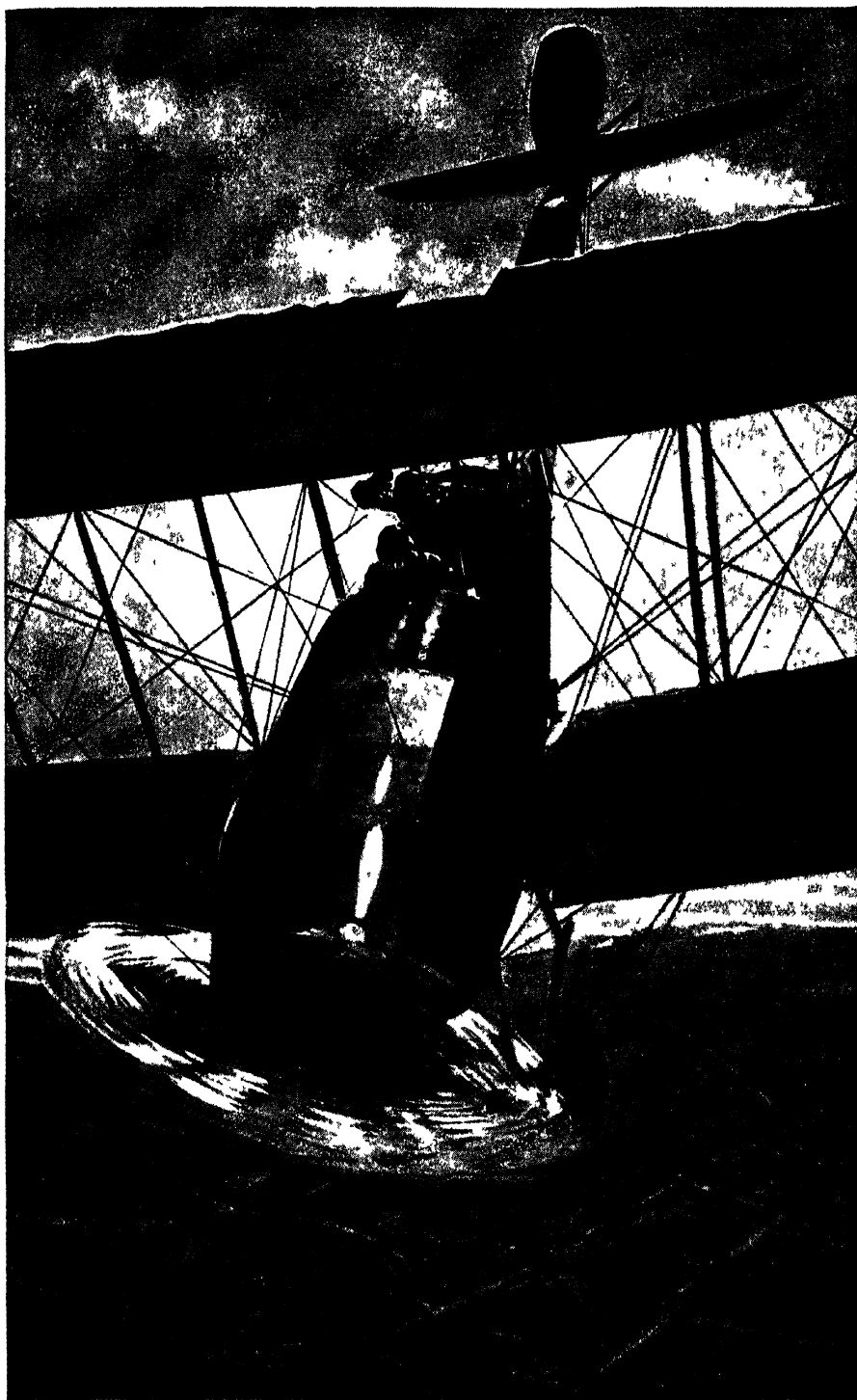
Colonel Avery Bishop is a young Canadian cavalryman, rather small in body, but with the fine hands and quick eyes of a horseman. He entered the Air Service in the gloomy year when the Fokker air fighters held the sky, and did much to recover the command of the air for the British armies. At the time the Germans used to come over in the grey of the evening, concealing themselves in clouds, while one of their number flew at a low height in a clumsy way, acting as a decoy. Bishop had a way of fighting of his own. He liked to go out alone, and, however many Germans he met, he gave them battle.

One evening twelve enemy machines came over the aerodrome. Half dressed, Colonel Bishop tumbled into a machine, and, with the enemy firing on him from above, climbed up to them. He sent two machines down, and the others gave up the action and flew away. Then it was that

the Germans laid their great trap. He was met by a single enemy scout, whom he chased. The German made a running fight over the opposing armies, and led the Canadian to the appointed place of ambush. Down from the cover of the clouds suddenly swooped twenty German pilots, many of them with observers and machine-guns. Like a wolf-pack the Germans formed a ring round this solitary hero of Canada and drove at him, firing streams of bullets.

But Bishop could handle an aeroplane better even than he could handle a horse. Not a single German could anticipate his movements, and shoot at the spot where he would be when the bullets passed. He side-slipped, he rolled over, he pretended to be knocked out and falling to a crash; he rushed up in an unexpected direction, and finally he manoeuvred into his favourite position when fighting against odds. He raced the bullets and missed them all the

THE MAN-BIRDS SWOOP DOWN TOWARDS EARTH



AN AEROPLANE MAKES A DIVE

THE CHILDREN'S TREASURE HOUSE

time. He climbed up on the outside of the German ring, and got close to an enemy machine which served to screen him against the fire from nineteen other machines.

The Canadian's grand quality as an air fighter then came into play. He was an absolutely deadly shot. He never shot at a German or at a German machine; he played with his man for a few seconds, judged what the man could do, and then aimed into the empty air. Down went the first German of the twenty. He had flown into the place at which Bishop had aimed.

Still manœuvring in a wild, fantastic way, the Canadian pilot got alongside another enemy, who screened him from general attack, and shot him down. Then followed another fast and furious skirmish for positions. The Germans drew off to a distance

and tried to shoot, but Bishop played in front of them right and left, dancing like a gnat in the evening air. The Germans had to come closer if they wished to get a shot home, but, when the great formation opened up in another attempt at an enveloping movement, the Canadian again, by an infinite amount of dodging, won a favourable position for a duel, engaged his enemy before the others could arrive, and sent him down. He fought through all the pack. Afterwards he circled over the German aerodrome, shooting down every machine that tried to climb to him.

When he was sent home for a rest to train other fighters, Colonel Bishop had won at least a hundred fights, and brought fifty German machines down actually in the sight of our astonished British troops.

What the Lost Pilot Found in the Mist

There was a Naval air wing at Dunkirk, where the pilots were wild with anger at the Zeppelin raids on London. They continually tried to meet the great airships and punish them, and one of them overtook a big German airship and struck it with a bomb, but failed to bring it down.

One morning in June, 1915, the Wing arranged to attack the Zeppelin sheds near Brussels, and some pilots reached their goal, and set the shed and the Zeppelin in it on fire. But the youngest of the naval airmen, Lieutenant Reginald Warneford, lost his way in the morning mist, and ended by flying aimlessly between Brussels and Ghent. Fortune was on his side, however. A Zeppelin had left the Brussels sheds and was travelling towards Ghent at the low height of 6000 feet. The flying Germans could not see the little monoplane, but Warneford saw the huge silvery body of the raider, and made a climbing flight in a slanting direction which brought him right over it.

Then, determined to lose his life rather than fail, he swooped within a hundred feet over the Zeppelin, and loosened six bombs.

The great machine was just over the convent at Ghent. It exploded in a huge flame, and the burning wreck crashed down on the convent buildings. The force of the explosion overturned Warneford's machine and stopped its engine. Down went the young pilot in a death dive, swinging under his overturned aeroplane.

It was scarcely four months since he had taken his certificate as a pilot at Hendon, so that he had little experience, but his cool courage served his need. In his overturned position he managed to keep control of the levers, and the cheering people in Ghent saw him recover control before his monoplane crashed. He landed safely by the Scheldt river, near some field hospitals of the German army. Swarms of grey figures rushed out to capture him, but they arrived too late, for Warneford was back in his cockpit, working desperately at his engine.

He succeeded in starting it, and, as the enemy ran towards him, his monoplane lifted and flew back to Nieuport, carrying in it the happiest aviator in the world, the first conqueror of the Zeppelin.

The Amazing Sight Over a Forest

Towards the end of October, 1918, when Sir Douglas Haig was making that last advance which broke the German armies into two fugitive pieces, there was fierce aerial fighting over a large tract of woodland by Landrecies. The German aviators, in a last desperate, concentrated effort, put forth all their strength to stop British pilots from

winning the command of the air, but the Britons were not to be denied.

Major William G. Barker observed an enemy machine over Mormal Forest, and, attacking it, broke it in the air. But at the same time a Fokker swooped upon him and wounded him in the thigh. In return, he shot his second enemy down in flames.

DRAKES AND RALEIGHS OF THE SKIES

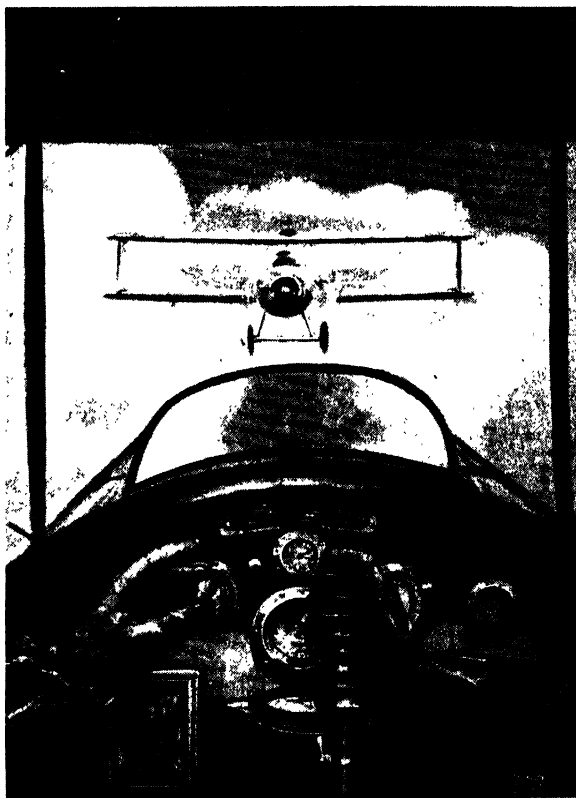
Before he could return to his lines and get his thigh dressed, the major found himself surrounded by a large formation of Fokkers. Every German air-fighter for hundreds of miles was gathered over the forest. They drove at the lonely Canadian from all directions, firing as they came on. Two of the enemy Barker shot down, but he received another serious wound which shattered his left thigh. The agony in both limbs caused him to swoon, and his machine began to fall out of control. Recovering his senses in the rush of air, he guided the machine with one hand and shot with the other, the leg controls being useless to him. Another large band of Germans was over him as he tried to make for his lines, but, reckless now whether he lived or died, the major charged the nearest German 'plane, intending to ram it and die. But he fired as he charged, and his enemy fell in flames, just clearing his propeller.

But even yet the victor had no cause for any feeling of relief, for as he cleared the blazing machine another German marked him down, shattering his left elbow. Once more the major fainted, and on coming to his senses found himself still being attacked. Then it was that the foremost British troops in the battle of Mormal Forest witnessed, above the autumnal woodland, one of the immortal events of the war. They could see one British 'plane assailed by a throng of German 'planes, but they did not know that the British pilot was a man with an arm and two legs shattered. They could only marvel at his agility, his skill, and his terrifying intrepidity.

Numb with pain and weakness, yet with a spirit of immortal valour triumphant over

his broken body, this hero of Canada, and of all the British peoples, fought out his fight against sixty German machines. He dived on the nearest German, in a desperate ram or wreck plunge, and, wrecking it, saw it blaze and fall. Through the gap thus made in the hostile circle the stricken pilot escaped, and at last approached the cheering British troops. But there was one more ordeal before him still. Another large German formation swooped between him and the British line.

No German engaged could have suspected the desperate condition of the lonely pilot. Major Barker afterwards could not clearly remember what he did, but the British infantry on the ground saw it all and cheered madly. The Canadian began to dodge, like an expert using both feet and both hands. Perhaps there was a mixture of bodily weakness and the rare spirit of man in his handling of that bullet-ridden aeroplane that deceived his enemies. Some of his tumbling swerves were not feints, but his recoveries saved him. He tumbled



AN AIRMAN SEES ANOTHER MACHINE REFLECTED IN HIS MIRROR

away from the most dangerous of his crowding enemies, recovered control, and charged another German, and at last he broke the German ring, soared over the British front, and prepared to land. But his poor body gave way as he came down; he kept just strength enough to keep from swooning and to prevent complete disaster; but he crashed on landing, and was recovered from the ruins of his machine. Nevertheless, he lived, and gradually, under the care of worshipping doctors and nurses, his wounds began to heal, and his recovery crowned with happy romance one of the finest exploits in the history of the war.

The Seaplane on the Masts

On a misty day in the middle of September, 1917, Flight Commander De Ville was making for land. He struck against one of the aerial masts of a shore wireless station, and his machine was wedged in the air in an extraordinary fashion. The unconscious body of the pilot was flung out of the cockpit on to one of the wings.

Three seamen saw the accident. They climbed together a hundred feet up one of the masts, and then the leading seaman, Nicholas Rath, was hoisted up in a chair moving inside the mast for carrying out repairs. He climbed out on to the wedged seaplane, and held the body of the pilot

from falling off the machine as it rocked slightly in the wind. One mast had been broken by the terrific impact, and was bent into an angle at the place where the seaplane was wedged; the upper part of it threatened to fall if any weight was put upon it. Yet the other two seamen, Richard Knoulton and George Abbott, climbed up and lowered a rope to Rath. Rath placed the rope round the body of the flight commander, and the three men hauled the unconscious pilot from the 'plane into the inside of the great mast and lowered him to the ground. Every moment they expected the mast to collapse, but it held.

A Little Lesson for Generals

This is one of the legends of the East. Once upon a time, in the neighbourhood of Salonica, two distinguished commanders, one in the Army and one in the Navy, thought they would go for a joy-ride over Bulgaria.

It was very hot on the ground, and alluringly pleasant in the air. There was an old slow machine unengaged, and one of the great men could fly. They rose up, and went for some distance with a bombing squadron, but in the middle of the journey a large German and Bulgar formation of fast fighting 'planes blocked the way, and swept out for action. The British bombers kept together in wedge formation, and, being well armed and well handled, they beat the enemy off.

Angry at their defeat, all the chasers gathered about the poor little out-of-date machine with its august joy-riders. Quite in the best style of formation tactics, the Germans and Bulgars surrounded the little craft and closed upon it, shooting from all directions. The pilot was unarmed, and so was his passenger; there was not even a revolver in the bus. It seemed as if the only way the joy-riders could save their lives was to make an immediate landing in Bulgaria, to be conducted to the nearest prison. But the commanding officer re-

solved rather to crash than to fall captive. He had been a very good trick flyer before he rose to his august position, and he charged at the Germans in the manner of an aerial madman. He went under them, over them, and across them; he looped, twisted, and dived, performing every acrobatic trick he had ever practised, and many he had never tried before.

The German pilots sent to Bulgaria were not the best of their class, and the Bulgars were not used to such methods. One by one they fled before their agile and apparently deadly foe, who refused to fire a single shot until he had come within the closest range. Having frightened them away, the unarmed pilot landed at the base, cutting away the under-carriage of the machine as he dropped. Spectators say that it was the neatest slicing operation they had ever witnessed.

When the lordly passenger disentangled himself from the ruins, he said he wanted no more aerial experience, and that when the war was over he would buy a farm and stick to the earth.

In the official record of the R.A.F. all this, of course, is only a legend. Great men in the British Army do not conduct themselves in this way; they are not like skylarking lads, but grave and serious persons.

The Men who Climbed Six Miles

One day, when the fighting was over, Captain Lang, an Australian, and a Canadian, Lieutenant Blowes, set out from Martlesham, near Ipswich, to test the height it was possible for man to climb.

They had a superb machine, the De Havilland, mounting a Napier Lion engine of 450 horse-power. With Captain Lang as pilot and Lieutenant Blowes as observer, the 'plane went up in large circles. Blown

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out to sea by a tempest wind, it went up about 25 miles off Yarmouth.

The trip began with an accident. Captain Lang's glasses became dim with frost at only 2000 feet, but the cold was already so intense that when the goggles were removed his left eye began to water and freeze over, until it was as big as a plum, and blind. With only one eye, the pilot continued his intricate work. He had to guide the machine, take observations at every thousand feet and write them on a board strapped to his right leg, note all changes of atmosphere, the pace at which the machine climbed, the revolutions of the

found his comrade had collapsed through the breaking of his oxygen-tube. In all high climbs aviators have to take up a supply of breath in the form of cylinders of oxygen with tubes and mouthpieces. The lieutenant had fallen unconscious while trying to pass a note he had written regarding his broken tube.

Undaunted by this grave accident, the Australian continued his climb. At last he could see the Thames from the neighbourhood of Yarmouth, with the sun shining brightly above and a faint haze stretching below. When his barometer registered 30,000 feet he was still climbing upward.



A CLOUD OF AEROPLANES

engine, the heat of the water in the engine, the heat of the oil, the pressure of the petrol, and the amount of fuel consumed. He had also to look over the side and take bearings of his position.

At 20,000 feet the cable of the revolution record of the engine broke. To fill up his time, the captain began to note atmospheric temperatures. This was work his observer was doing, but the pilot thought nothing would be lost by two records of so important a matter. At 28,000 feet he felt that the oxygen supply was growing short, and signalled to his observer for more. Getting none, he looked at Lieutenant Blowes, and

through a region no aeroplane had ever reached. Five hundred feet higher he went, higher than the top of Mount Everest, and then the pressure pumps behind the engine ceased to work, owing to the extreme rarity of the atmosphere, and the engine itself stopped. Down glided the De Havilland, the pilot making as gradual a descent as possible in order to save his body and the body of his unconscious comrade from too violent a change in air-pressure.

At 20,000 feet there was sudden joy, for Lieutenant Blowes, who seemed to have died, recovered, the air becoming dense enough to supply his lungs. When the two

THE CHILDREN'S TREASURE HOUSE

adventurers landed in Martlesham aerodrome again, however, they needed serious medical attention, their faces and hands being badly frost-bitten, and while they were in a very weak condition and slowly recovering Captain Lang committed a great crime. He related his amazing adventure to an acquaintance; he told a friend

this story of a journey unparalleled in human history; and, being so glorious and extraordinary, it was communicated to the public Press. Thereupon Captain Lang was *placed under arrest* by the military authorities.

It is the sort of thing that Militarism does—blind, stupid thing.

An Appointment in the Clouds

When the long battle for the air was going badly for the British side, Captain Albert Ball, of Nottingham, saved the honour of England. He was a quiet lad who disliked his work, yet did it as a matter of duty.

He made a little garden by his aerodrome, and took more pleasure in tending it than in winning glory as the champion of England. When the Germans introduced formation fighting, pack against pack, Captain Ball preferred to go on fighting single-handed. Now and then he led a squadron of British pilots, but he did not like team work. Whenever he could he went out alone, and was continually caught in ambushes. One day he fought two German machines till all his ammunition was spent. As the action ended without any result, he flew to the nearest German aerodrome, and dropped a note challenging the two machines to meet him again at the same spot.

At the hour he had fixed, Captain Ball kept the appointment, saw the two machines approaching, and opened attack. The Germans, however, had no regard for the chivalry of the air. As the English lad manœuvred for position, three other aeroplanes swooped upon him from the clouds. They were German machines of a new type, faster than his French machine; they could turn quicker and climb faster, and, helped by the pilots in the first two machines,

the newcomers outmanœuvred the young Englishman and forced him to land.

On a large field in the German lines, Captain Ball deliberately made as bad a landing as he could without damaging his machine. Thinking they had wounded him, the Germans also flew down, and ran forward to take him prisoner. This was what Captain Ball had expected. Leaning back in his cockpit, like an exhausted man, he opened out his engine, which all the time he had kept quietly running, and soared quickly above the planes of the angry Germans.

Until he was at last trapped and killed, over Lens, this was the only time in which Captain Ball was outmanœuvred by superior forces in the air. Single-handed he fought against formations of twelve German machines or more, returning at times with his own aeroplane so shattered that only by extraordinary skill could he keep it flying. At times he just managed to keep the wreck on which he sat from tumbling to pieces before he reached the British trenches. By his audacious skill he raised the spirit of our fighting forces at a time when most of our machines were so bad that they were called "murder machines." Inspired by his example, thousands of our young officers went forth to fight and die, the gallant forlorn hopes of the war.

A New Use for Gloves in the Sky

It is horribly cold at the height to which a pilot goes. Waiting like eagles to swoop on their enemies, they wore masks to keep their faces from being frost-bitten, and special gloves to save their hands from being numbed.

Lieutenant George Pargeter was accustomed to use his gloves in a remarkable way. Twice, when on patrol duty over enemy lines, his petrol-tank was hit by German fire. The petrol spurted over the machine, menacing it with flaming destruction, either when the next incendiary

bullet arrived or when the engine gave out a spark. And twice this gallant lad took off one of his gloves, climbed on to the lower plane, pushed the glove into the bullet-hole, and held it there until his pilot brought the machine safe back in British lines.

Major McCudden, a young air mechanic who succeeded Captain Ball in the position of air champion of England, nearly killed himself and a friend with his glove. He was flying carelessly on a day of great victories, when his glove flew off and struck the propeller. Owing to the extraordinary

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speed at which the propeller was revolving, the bit of leather acted like a steel shell, and wrecked the air-screw. Only with extraordinary skill was McCudden able to descend. On another occasion the young Irish pilot had a bout with a German, and returned to the sheds for more ammunition. He was then in the middle of his victorious career, and, feeling very happy, thought he would loop the loop while searching for his enemy.

He pushed the machine to a high speed, took a deep breath, and pulled the stick back. When half-way through the loop, with his head hanging to earth, he changed his mind, and pushed the stick forward. Up shot the machine with a fearful pressure on the bracing wires. The drums of ammunition for his Lewis gun spun out and over the top plane, and there came a horrible scrunch. The machine zigzagged in the sky as three of the four propeller-blades

vanished in a cloud of splinters. The Lewis gun was wrenched from its mounting and flung at the pilot, striking him on his knees.

But the pilot did not lose his presence of mind. He shut down his engine, and worked furiously at his levers to keep the machine balanced. Finding that it was still wobbling, he turned round and discovered that one of his lost propeller-blades had cut through the tail-boom, so that only one bracing wire kept the rest of the tail from falling off. In spite of the petrol being cut off, the engine was still turning slowly round, but McCudden saw a field, and, by a miracle of skill, landed. At that very moment, as his machine stopped running along the ground, the centre section broke, and both wings began to curl up. Either the ammunition-drums or the propeller-fragments had broken the central bracing wires. No man in all the war could have had a closer escape from death.

Adrift in the African Wilderness

Over the wild jungle growth of the Rufiji river mouth, Squadron Commander Moon flew for many months. He directed the fire of British warships on the Königsberg when that forlorn raiding cruiser ended her career ingloriously in the mouth of the East African river; and he explored the trackless waste, watching the movements of the Germans. But it was terribly hot on the steaming tropical coast, and the heat was not good for delicate motor engines.

One day in 1917 engine trouble brought him down in one of the uncharted creeks of the tangled watery jungle. He had with him a naval commander. Finding the engine beyond repair, he destroyed the machine to prevent its capture. Then for three days and nights the two officers wandered about the wilderness, striving to avoid capture and to regain their ship. They had nothing to eat, and most of the time they had to swim, as the bush was so thick by the side of the streams that

they could not get through it. On the second day they made a raft out of some spars and an old German window-frame.

Their idea was to give up trying to find their course seaward and to let the stream carry them out. For two days they drifted and paddled on the raft, and were finally carried out to sea when the water was rough. But not a sign of their ship could the famished, thirsty men discern. They were far away from it.

The naval commander began to grow exhausted. Commander Moon did all he could to save him, but there was one thing he could not give him, and that was strength, and the poor man perished.

In the afternoon Commander Moon abandoned the raft, which was going out into the ocean, and swam toward the shore, reaching it after a terrible struggle with the tide. He was taken prisoner by the Germans, but released when the enemy was hard pressed and almost surrounded.

One Man in a Ring of Fire

One of the first officers to distinguish himself in a fight against overwhelming odds was Lieutenant Allan McLeod. He set out on a cloudy day, with Lieutenant Hammond as observer, and carried a load of bombs. Swooping down on the German trenches, through heavy machine-gun fire, the Britons loosened their load of bombs, and then climbed up, under the clouds, to

return to their own lines. When the British machine was at a height of about 5000 feet, eight German machines descended from their hiding-place in the clouds and encircled the British aeroplane.

By all kinds of manœuvres the pilot dodged his enemies. One scarlet-painted German descended towards the ground and then came up in a rush, getting on the tail

THE CHILDREN'S TREASURE HOUSE

of the British machine. McLeod swung round, Hammond brought a gun to bear, and the enemy machine crashed to earth. Two other Germans closed in, but McLeod evaded one of them by rolling half over, and during the roll his observer shot the second German down. Back swung the British pilot, shooting and guiding his machine at the same time, and with the help of his comrade he sent a third German machine to destruction.

This left five enemies in action, and they continued to circle round, pouring in bullets. McLeod was hit five times, but he went on manœuvring for another opening to attack, won his opening, and, with Hammond still pouring out bullets, sent another enemy down in a spin. Terrible disaster then overwhelmed the Britons. A tracer bullet, which sent out flames when it was fired, struck the petrol-tank and set it on fire. Two of the remaining German machines were struck badly and went out of the fight, but the others dived at the burning British 'plane.

Then it was that Lieutenant McLeod showed what manner of man he was. In spite of his wounds he climbed out of the

cockpit on to the plane, and, with German machines still pursuing him, he balanced the burning wreck. To prevent the flames from utterly consuming the structure in its swift descent, the gallant pilot kept the machine steeply on one side. Lieutenant Hammond, who had been wounded in six places, stuck to the machine-gun in the face of the scorching flames, and kept the pursuing Germans back by sharp bursts of fire. At last, down on the ground, between the opposing armies watching this fearful fight, crashed the flaming mass. As huge tongues of flame burst forth from scattered petrol, Lieutenant McLeod jumped free, and then returned to rescue Hammond, who had been seriously injured in the fall.

The German machine-gunners in a neighbouring trench were merciless in the presence of this heroic spectacle. They fired at the wounded pilot as he dragged his observer over the chaos of No Man's Land. A bomb struck him, making a last fatal wound, but with his remaining strength he placed Lieutenant Hammond in the shelter of a shell-hole, and then fell down himself from exhaustion and loss of blood, winning the Victoria Cross but losing his life.

The Shepherds of the Air Fields

In the desert fighting in Palestine and Mesopotamia, machines were used which were not considered good enough for France. The Germans did not give the Turks their best machines, so there was an equality between the air fighters round Jerusalem and Bagdad.

But when Sir Edmund Allenby broke the Ottoman and seized the Holy City, the German commander of the Turkish forces, Liman von Sanders, obtained one of the best German airmen, mounted on an Albatros machine of the most powerful type. Early one morning the German pilot flew up, in the hope of surprising the poorly-equipped Britons and destroying a few Englishmen before breakfast.

As he climbed over the lines he spied two long-nosed biplanes, and recognised them as a type of machine which had grown out of date during the rapid progress of invention. The German knew the old type almost as well as he knew his own brother, and on his swift Albatros he proceeded to climb above his unhappy victims. Great was his surprise when he found that the British machines refused to be out-climbed, but his surprise turned to fear when he saw that the British pilots were getting above

him. When they turned and dived he became panic-stricken. He stood his Albatros on her head, and manœuvred as he had never manœuvred before, but his terror made him forget the first duty of an aviator engaged in a plunge to earth—he forgot to swallow a mouthful of air in the terrific rush towards the ground, and one of his ear-drums split.

Fast as he dived, the old British aeroplanes dived faster. They cut him off from the Turkish lines, and, manœuvring with extraordinary agility, pressed him backward to the British aerodrome. Whenever he tried to escape they came closer to him. Owing to his fright and the pain in his ear, the German never fired a shot, and, without a shot being fired at him, he landed at the place to which he was shepherded as a lamb to the fold, there surrendering as a prisoner and making the army of Egypt a present of a specimen of the finest and latest German fighting machine.

It was some consolation to him to discover that he had not been out-manœuvred by two old Martinsyde 'planes, after all, but by the newest of Bristol fighters. Sir Edmund Allenby had anticipated Liman von Sanders and also got new machines.

AT HOME IN BRITISH COLUMBIA

THOSE of us who live in great towns, or in the quiet countryside of our British islands, speak often of the British Empire without understanding what it means. Far away towards the ends of the earth the great empire extends, bringing under the British flag one quarter of the human race. But among these millions of human beings is only a little host who have gone out from home, and in all the British Empire the white population would not fill two Londons. A mother who lived with her children on a ranch in British Columbia, where the waves of the Pacific Ocean wash the edge of the empire in the New World, writes this letter, which will help those who live at home to realise what it means to "hold the fort" for England in distant places where lands are wide and homes are few.

WE lived among the mountains in a wide valley well cleared and cultivated. Its sides sloped upwards gently at first, and then stretched out into level spaces called "benches." Above these the ground was steep and broken, and at last became mountainous and inaccessible. Snow stayed on the tops of the highest peaks all the year round, but everything below that height was covered with virgin forest. Settlers had partly cleared the benches, but among the pines on the steep upper slopes and on the highest benches the wild animals still had their home.

In winter, when the snow lay thick on the mountain-sides and food was scarce, the hungry wild things would venture down into the clearings, and steal from their enemy, Man. All the year round they were always on the watch, ready to take advantage of every chance that offered.

There were abundant excitements in this life of ours, far from the towns. Once we had a week of fire, when the whole country was ablaze, and our only refuge was the lake. I dragged mattresses and an old tent to the creek, and put the children to bed there while I told them stories, and managed with a pail and a dipper full of water to extinguish the sparks as they fell about us in such a way as to keep the children unsuspecting of the danger. My husband and all the men in the valley were fighting to save the animals and homesteads. The noise and roar of flames and falling trees was terrible and unforgettable. We have had many such settlers' experiences, even to coming across a big black bear when we were picking nuts.

The animals were wonderful—the lynx that dared to take our cats from the verandah, the grey timber wolves that came in the hardest winter, the skunk that made the house unbearable for days because somebody fell over it one morning on the way to breakfast, the deer that came to the salt-lick in the bank opposite the house, the lame coyote that we could never shoot, and the howling band of coyotes that kept us awake at night. The birds were wonderful, too—the humming-bird in my garden, the kingfisher in the creek, and such lots and lots of them all.

I remember the first time I put on the big black fur coat I had got ready for the Canadian winter. I walked through the field to help to catch the pony, and I noticed the sheep bunched up together and the horses pricked up their ears, seemed uneasy, and stared hard in my direction. I asked my husband what was the matter. "You are in a wild-game country, and you are wearing the skin of a wild animal," he replied. Until the pony got used to me in my new coat, he had to be held until I was safely in the buggy. It was instinct, of course, as he was half Cayuse, descended from the ponies of the Cayuse Indians.

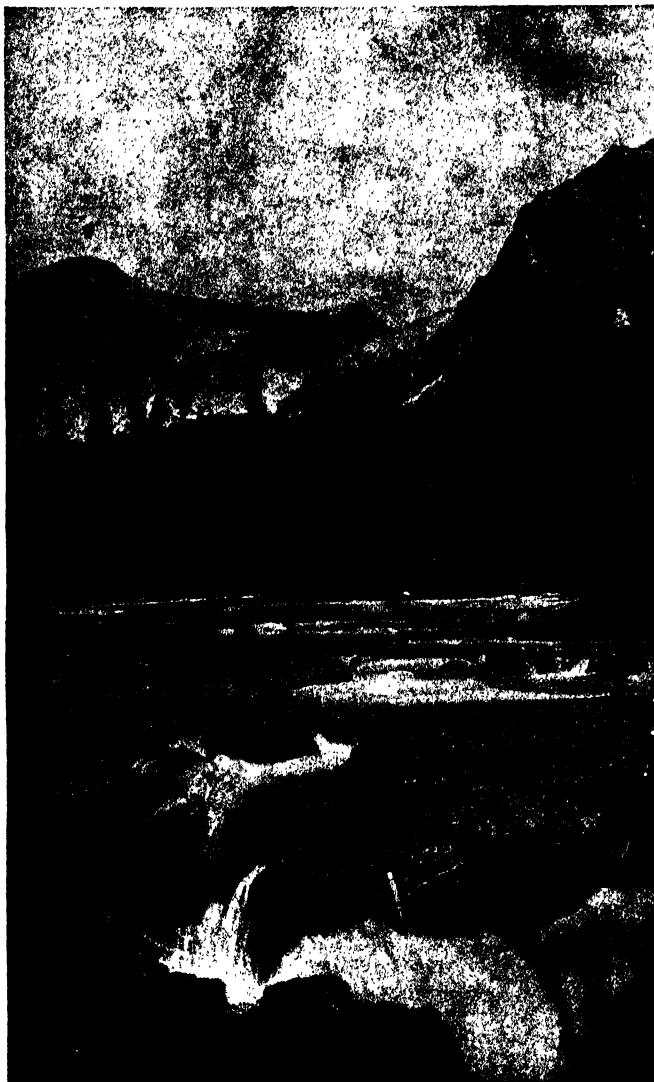
The deer used to come down the farther side of the valley, cross our meadows, bound over the creek and fences, and reach the face of the bluff opposite the ranch-house, where there was a "salt-lick." Here they would stand licking away at the salt they found in the cliff, and our little people would creep noiselessly to the windows to watch them, but at the least sound they would bound away and disappear among the trees. As they ran away we could plainly see the white patches on their coats, which they are able to open out as a danger signal, but which do not show unless the animal is disturbed. One summer we had two deer and a little fawn in an uncleared corner of the wheatfield. They slept there, and were off into the forest soon after daybreak. It was beautiful to get a peep at the family at home, and repaid us for all the wheat they took.

The coyotes were a great nuisance. They would haunt our poultry-yard even by day, and snap off any chicken that ventured too near the brush. Lambs were not safe unless enclosed, and I have known

THE CHILDREN'S TREASURE HOUSE

even calves taken. These were safe enough, however, if running with the cows, for if there is any danger of attack from wild animals, the cows get the calves in a group, and form a ring round them, *heads outward*, and it goes ill with any creature that faces their horns. The coyote is rather like a

at night, especially when it is brilliant moonlight and cold and still, and they will howl round the house for hours. They used to wake the children in the night, and the little ones would creep closer under the blankets, and with little, hushed voices would say, "Mother, is the bar up?"



A BEAUTIFUL SCENE IN BRITISH COLUMBIA—THE RAPIDS OF KICKING HORSE RIVER

dingy-looking collie; it has a fine long tail, which is often tucked tightly away between its legs, for it is a miserable coward, and skulks away as neither dog nor wolf is ever known to do. It seems to be a cross between the two, and the only thing that is not really bad about it is its skin. Bands of coyotes come out of the brush

I think the mother bears must have warned their cubs of the dangers to be met in the valley from man, for I only saw one, and he learnt too late that his dinner of herbs in his own haunts was safer than the tempting fruits of the valley. A neighbour had some very fine plums in his orchard, and bears' scent is very keen, so that when the plums began to disappear he guessed the thief might have four feet, and a trap was set under the tree. Early the next morning we were called out to see the culprit, and there was my poor little black bear, the little cub that loved forbidden fruit, with his foot fast in a steel trap. He had dragged himself, trap and all, right into the open towards the mountains, and, exhausted as he was, he made some determined rushes at me as I took his portrait. I only hoped the chain would not break when I saw his angry little red eyes and the look of baffled hate in his poor, dusty little face. A shot soon put him out of his pain, and the next day I was offered "bear-steak"! It was the first time I had looked a wild trapped thing in the face, and it was not meat for me. Bears mostly live on fruit, nuts, roots, and are very fond of ants, but they do eat flesh at times.

We had an old horse called Jim whose working days were ended, but the autumn was fine and the pasture rich, so we thought old Jim might have the benefit of both and live till the first cold came. So we turned him into an enclosure of five acres across the creek that divided the ranch. It was a glorious place, our favourite spot, where clover grew thick under the trees and the cattle tramped down little paths through the bush, ending in

RICHES OF LAND AND SEA IN BRITISH COLUMBIA



THE CULTIVATION AND IRRIGATION OF THE GREAT FARM LANDS OF BRITISH COLUMBIA



THE HARVEST OF THE SEA—HERRINGS FOR THE WORLD'S BREAKFAST TABLES, CAUGHT IN BRITISH COLUMBIA

IN THE WILDS OF THE GREAT DOMINION



A SUDDEN SURPRISE FOR WILD LIFE—CARIBOU IN FLIGHT IN BRITISH COLUMBIA

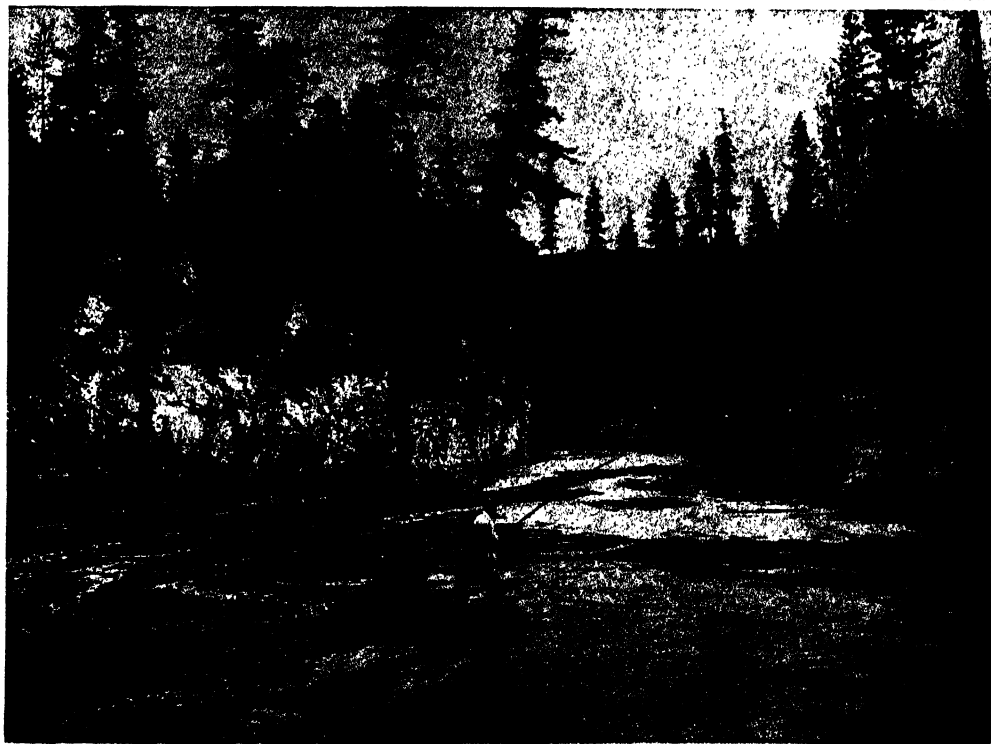


LOOKING DOWN THE IMPRESSIVE MCGILLVRAY CREEK, IN BRITISH COLUMBIA

A PEEP IN THE EMPIRE'S WONDERLANDS



IN CAMP BY A TROUT STREAM AMONG THE GLORIOUS MOUNTAIN SCENES OF BRITISH COLUMBIA



THE WILD ROCKY GRANDEUR OF THE SHUSWAP RIVER. IN BRITISH COLUMBIA

THE CHILDREN'S TREASURE HOUSE

mossy dells, where they lay through the heat of the day. The waggon road, leading to the big hay meadow beyond, lay between bushes of wild rose, hazel, cranberry, and wild cherry. Silver birch, poplar, and cotton woods bordered the creek, and the small harmless things of the forest lived in the denser parts. Although stoutly fenced, it was really a tongue of the forest that stretched down between the meadows we had cleared, and it had been left because of its beauty. It was a little wonder-world for the children, and they played in it all the summer.

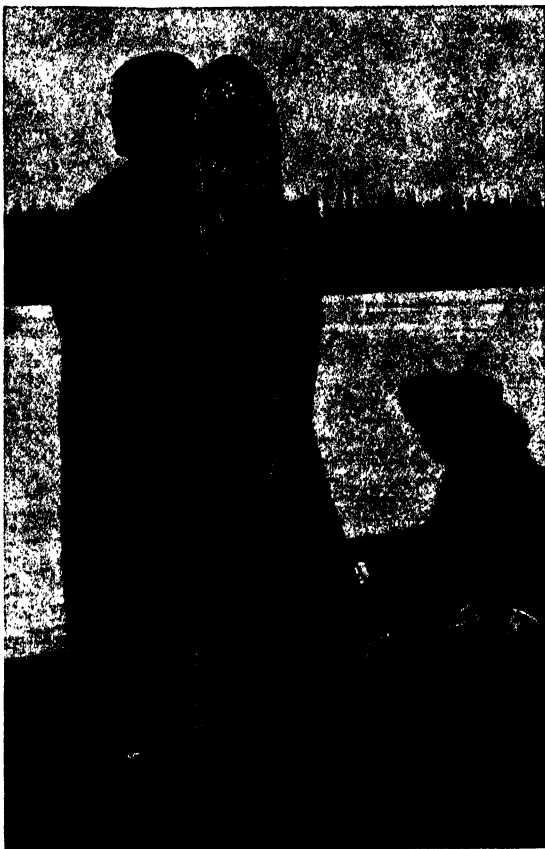
One evening we heard a dreadful chorus of howls and yelps, and a terrible, unknown cry of some animal either hurt or in great terror. Somebody said, "The coyotes have got something." But we had no cattle over the creek just then, and thought no more about it. Two or three days later I went across the creek with the three children, and as we were picking nuts there was a great crashing in the bush in front of us, and a big black thing lumbered swiftly away. Little five-year-old, quicker than I, cried out, "A bear, mother—a

bear!" and daddie, who happened to be within call, came running up, and followed up the trail. He could see nothing of the

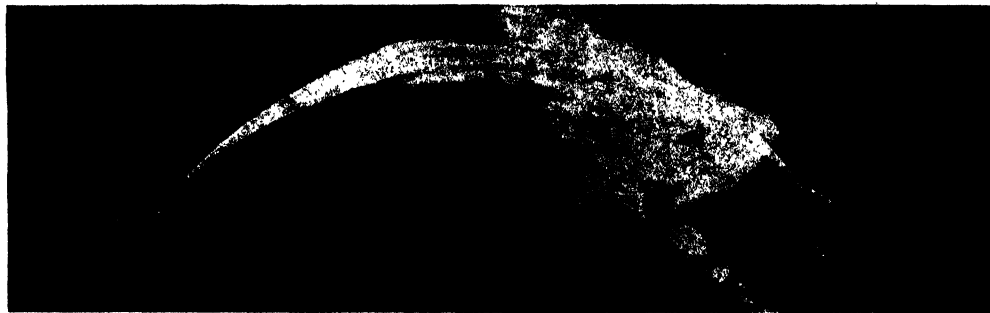
bear itself, but he found fresh tracks through the enclosure, leading to a spot where the cattle used to come and drink.

And there we found all that was left of poor Jim! For days the coyotes must have dogged him, and then, when his head was down, drinking, they leapt on him, and in his struggles to throw them off and get up the bank his forelegs had sunk deep in the mud, and he must have been worried to death. A bullet would have been merciful, but we had never feared an attack so close to the house. The smell from the carcase had drifted up to the heights and brought Mr. Bruin down for his share,

and it was fortunate for us that morning that Bruin had had a meal when we disturbed his nap. The men brought chains and ropes and a team of horses, and hauled out the bones of our poor old horse. After he was buried we never had a second visit from the bear, but it was some time before we ran about as fearlessly as before.



A RED INDIAN FAMILY IN BRITISH COLUMBIA



POWERFUL STREAMS OF WATER THAT WASH SOIL FROM GOLD IN BRITISH COLUMBIA

MIGHTY CANADA

The Dominion That Will Lead the World

THE day is coming when Canada will be within a day of London; the day is coming, too, when Canada will lead the world.

CANADA, mighty Canada! No nation on the earth stands at a nobler dawn. Before her lie a thousand years of greatness and power. About her lie the illimitable spaces of the golden earth, ready to yield at a touch whatever she desires. Growing up in her homes are the children of as fine a race as ever sees the sun.

CANADA, incalculable Canada! No man can say what the great Dominion will become. It will be packed with millions of people. Great cities and towns will rise in its empty spaces. Its mighty rivers will be harnessed to electric power, and this vast realm of natural wealth, this splendid home of happy people, may be the throne of civilisation yet, in fifty years, or perhaps a little more. Canada is proud of these four years that are past; she must thrill with hope as she looks into the years that lie ahead.

FIVE nations have swayed the world since the Middle Ages. There was the age of Italy, enlightening other countries with her great fire of new knowledge and art. There was the age of Spain, widening the bounds of space and increasing the resources of Europe by the discovery and settlement of America. There was the age of France, spreading grace, urbanity, and the spirit of reason among European peoples. There was the age in which Great Britain intervened, transforming the earth by her political and industrial systems and her material and intellectual inventions. There was the age of great awakenings, which seemed likely to be the age of Germany, but will probably now become the age of America.

What nation will follow the United States in the rise to world-power and wide possessions?

We may be almost sure that it will be Canada. In less than fifty years the second daughter State of Britain may very well be feeding both her mother and her elder sister. Her resources in food and metal will rank among the master forces of the League of Nations. Everything points to the future grandeur of the Canadian people. Before the war, while poor Europeans were still migrating to the

United States, large numbers of enterprising, prosperous American farmers were moving over their frontier into the illimitable wheat-lands of the north. American capital was flowing into Canada in a river of gold to develop the mines of the country. Even the Kaiser sent agents to purchase great tracts of ground in Western Canada, and it seemed that only the Briton failed to take his proper part in developing this greatest of all English-speaking countries. Had we spent on Canada half the thought and energy we have spent on India—a land where the white race cannot prosper—the Dominion might already be almost comparable in production and resources with the United States.

Canada at present contains, in a space almost twice that of Europe, a people scarcely more numerous than the people of London. Magnificent is the work Canadians have done, in peace as in war, with their comparatively small numbers. As in France and Flanders the Canadian soldier won some of the most important battles—at Ypres, Vimy Ridge, Amiens, Cambrai—so in their own country the Canadian farmers and engineers have achieved victories of peace out of all proportion to their apparent strength. It is when we

THE CHILDREN'S TREASURE HOUSE

think of what two million Canadian men have done in a few years, in developing one-third of the entire territory of the British Empire, that the coming reign of Canada seems likely to begin in less than half a century.

During the war the Canadian farmer produced field crops to the value of more than two hundred million pounds sterling. He also helped to feed the British people with meat and cheese, and sent them timber, minerals, machinery, and munitions. Out of a total adult male population of two millions, practically half a million of the finest men of Canada were fighting on the battlefield, and others were coming from the farms when peace arrived. Great Britain did remarkably well, in working as in fighting, but Canada did better.

The reason for this was that the Canadian has inherited from his kinsman, the American, a belief in the general use of machinery. The lack of labour in the Dominion has been the great opportunity of the engineer. Canada has grown strong through being wealthy and yet in want. She has been rich in natural resources of almost every kind, yet poor in the number of hands she could use in her work. So she has built machines to sow, reap, and thresh her crops, and created devices for making the machinery. Her wheat-lands in Manitoba, Saskatchewan, and Alberta consist of immense, treeless prairies, stretching flat beneath the round of the sky. When fully peopled and cultivated, the prairie provinces will produce as much wheat and oats as are now grown throughout the world, and about half the barley that mankind at present requires.

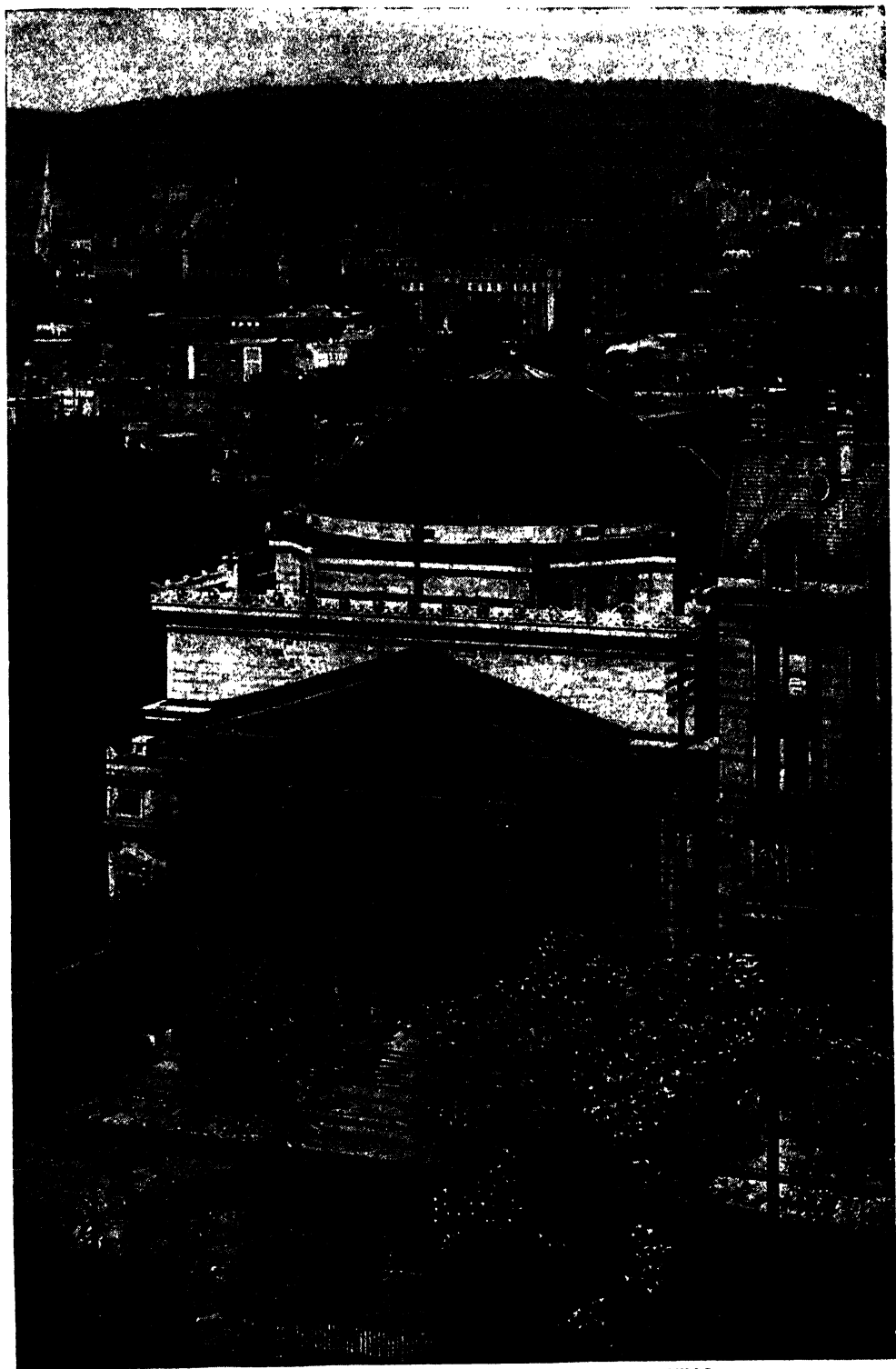
The boundless spaces of Canada impress the traveller who looks out across the wide plain. In harvest time a sheet of gold shines between the sunrise line and the sunset line, filling a stranger with a sense of illimitable monotony; but the prairie farmer has a passion for the huge distances of his plains. During the war, young Canadian farmers in

England would pucker their faces in an agony of yearning for the bright, cold, prairie air in winter while they were living in some of the most picturesque and varied scenery in Southern England. These men dislike hills and hate mountains. They call their own Rockies the "Bad Hills," in spite of the fact that in beauty and sublimity the Canadian mountains are among the wonders of the world.

A born Canadian prairie man is unhappy when away from his monotonous prairie, and as he grows finer wheat upon it than any other land produces, sending it overseas in continually doubling quantities, it is well for our crowded islands that he is contented with his wide, flat farm. Canada can easily produce a grain crop of five million bushels, more than enough to feed a hundred million people. She has the land to do it, and also the machinery. All she requires is more farmers and farm-hands. With only a population of half that of the British Isles, Canada could feed Great Britain, Western Europe, Italy, and part of the United States; and in the next quarter of a century we may see her decisively succeeding the United States as a food provider, and sending wheat, oats, meat, fish, and potatoes to hungry Americans as well as to famishing Europeans.

The Canadian fisheries will be developed in the next few years, with a far-reaching effect on the diminished food resources of Europe. The Canadians have the largest fishing waters in existence, consisting of five thousand miles of Atlantic coast, seven thousand miles of Pacific coast, and nearly a quarter of a million square miles of fresh water. The present trouble is that this land of the future has a fishing fleet of only 1400 vessels, with small boats manned by less than seventy thousand men. Measures, however, are being taken to develop the fisheries and bring the fish across the Atlantic in cold storage, and in a short time Canada will greatly add to the food supply of the Old and New Worlds.

GREAT CITY OF A GREAT DOMINION



MONTREAL IN THE SHELTER OF ITS FOREST-CLAD HILLS

THE CHILDREN'S TREASURE HOUSE

Food production will always be the main industry of Canada. She possesses almost unknown and unpeopled tracts of territory, lying in latitudes at which the Siberian peasant produces wonderful crops. These lands will not be settled and cultivated for some years, but their mere existence shows that the resources of Canada, a country belonging to a free people with astounding enterprise, have been developed hardly more than the resources of Siberia under the Tsars. Already, however, the wheat-lands of the prairie provinces have upset the smaller farm-lands in Ontario, Quebec, New Brunswick, and Nova Scotia, and in these eastern lands the farmers are abandoning the growing of wheat and establishing dairy farms, orchards, vineyards, and sheep-runs, sending their fruit, cheese, and butter across the Atlantic.

In these old eastern farms electric power is being employed in an extraordinary way. Ontario and Quebec, for example, are regions of water-power, and the lack of coal is made good by innumerable waterfalls capable of generating twenty million and more horse-power. Government transmission lines already distribute the water-made electric current over two hundred miles, at a cost much cheaper than coal-power, and the enterprising farmers, hitching their machinery to the Government lines, get a great deal of work done for them by their rivers.

The use of one horse-power night and day for a year costs only about £2, and it will light the farmhouse and cattle-sheds, toss the butter-churn, cut the cattle-food, thresh the corn, sweep and dust the house, and, if need be, rock the baby's cradle. When the farmers are provided with a light yet powerful accumulator, which is likely to come in the course of a few years, they will charge their tractors from the transmission line, and plough, hoe, and harvest with power obtained from the Niagara Falls and the lesser cascades of their country.

Electric engineers who know how to use a turbine to obtain full power out of falling streams are the men most

needed at present in Canada. The country depends on them to make her a great manufacturing nation as well as a dominant farming nation. At present the Canadians use under two million horse-power daily from their rivers, yet there are four hundred million units of water-power available for them in the regions already peopled. Around all this great source of power are mines on which all the world depends for many of the finest instruments of manufacture. Nickel, for instance, which is required for making an alloy of highly tempered steel, is almost a Canadian monopoly, and new nickel-mines are still being discovered. When it was found that cobalt could be used for making fine steel as well as nickel, Canada immediately produced the only considerable source of cobalt, having so much of it that for long she did not know how to get rid of it.

The mineral resources of Canada have scarcely been touched, as the greater part of the Dominion has never been explored for its ores. Iron exists in abundance, but the population is not yet spread over an area wide enough to make it worth while for many of the deposits to be used. The main trouble at present is the general lack of coal. There are coal-fields on the Atlantic side in Nova Scotia, together with a vast field of coal in British Columbia and other mines by the Pacific seaboard, but Canada wants more coal in all her inland provinces, and her men will find it for her when the northern parts of the country are more thoroughly explored. At present there are huge fortunes merely waiting to be picked up. During the war a young Canadian discovered a large well of petroleum, and as the Navy was needing oil at the time he offered his discovery to the British Government, asking for no reward. His offer was refused. He then approached some bankers, who laid a pipe-line for him, by means of which he sold the oil to Admiralty tank steamers at the market price.

To the man who knows something about geology and engineering, and

MIGHTY CANADA

is ready to work for his living while seeking for honest power, Canada is a land with the widest roads open to talent. Some years before the war, the writer knew a young Canadian whose dearest object in life was to prove that the German critics of Scripture were wrong in their views on Isaiah. It was hard to get him to talk steadily about anything except Teutonic methods of barbarism in regard to Isaiah.

This remarkable young man, after teaching himself Hebrew and also studying German, suddenly awoke to the fact that without a long university training he would not be able to bear down the German critics by weight of knowledge. As soon as he saw that money was needed to rescue Isaiah from the Teutons, he took a train across the continent, found work in a salmon fishery in British Columbia, lived hard, saved money, borrowed more, and started canning salmon himself in a small way. As soon as his business began to expand, he borrowed more money, enlarged his factory, made a large annual profit, sold his business for thousands of pounds, and then came to Europe to study Hebrew and defend Isaiah.

Such adventures as these illustrate the sort of business romance that makes the undeveloped continent of Canada the finest field of opportunity that a man with knowledge can enter.

British Columbia is the England of the great Dominion. This western land is warmed by the Oriental gulf stream known as the Japan Current, which softens the winds and brings warm rains. Many of the old Canadians, bred for generations in the dry, keen prairies, do not like the mild and moist climate of their Pacific coast, where snow seldom falls and never stays; but Englishmen, accustomed to rain, fog, and warmth, find British Columbia very homelike. At present the British Columbians are borne down by their trees. They could supply the world with timber if they had hands to cut and cart it. The forests are so dense, and the trees

of such enormous size, that single farmers cannot clear the land. What they need are wealthy companies, using machinery in a great way in felling the timber, with lorries to transport it for shipment through the Panama Canal.

The forest wealth of Canada is beyond all calculation. It is far greater than that of any other country, and now that the United States has lost most of its forests, while Russia has wasted and neglected her timber, Canada and the neighbouring island State of Newfoundland, from which the paper of the Treasury House comes, have practical control of the white-wood supply on earth. From their forests will come nearly all the pulp for making paper, and the timber needed for house-building and general purposes. The aeroplane and the small airship may make Canada mistress of the principal timber trade of the world. The amount of timber cut for use and sale is generally made good by the annual growth, the large forests reviving naturally by the spread of seed. It is the great forest fires that diminish the wealth in timber, and now that the work of watching for fires over large stretches of scantily peopled country can be carried out by observation aircraft, in wireless communication with fire-brigade centres, the timber of Canada will be better preserved. The flying machine, in the warlike use of which Canadian pilots so finely distinguished themselves, will also be useful for exploring the barren lands.

The great Arctic wildernesses of the Dominion have long been one of the chief sources of fur. The fur was obtained by hunting wild animals, but this method is now being abandoned, and an extraordinary industry of fur-farming is being rapidly developed. Some years ago, two farmers on Prince Edward Island began to breed silver-black foxes in captivity. The animals, being well fed and well looked after, had finer and more handsome coats than those caught in traps. The fur-farmers were able to

THE CHILDREN'S TREASURE HOUSE

obtain a thousand pounds for a single fox, and just before the Great War broke out the business they invented was being carried out by companies with a capital of millions of pounds. Fur-farms are now established in other Canadian provinces, and it is expected that this new kind of stock-breeding will spread and become the main source of fine furs for America and Europe.

In the northern wilderness, by Hudson Bay, there is another branch of stock-breeding being discussed. There are at least thirty million wild reindeer ranging the barren lands. Valleys and hillsides for miles appear to be moving masses of animals. Counting them is impossible. They can only be reckoned in acres or square miles. These caribou, as they are called, live on the mosses and lichens of the North-West Territories, and are so tame that they allow men to walk among them as a herd of cattle in a field would do.

The caribou ranch, with Red Indian or Eskimo ranch hands, will add considerably to the meat resources of Northern America and Western Europe in the next twenty years.

In the northern wilds of Canada, as everybody knows since the rush to Klondyke, there is much gold to tempt the adventurer. Other minerals of higher utility are likewise available in huge quantities. The Eskimos have found many mines of almost pure copper, as also have some of the northern Red Indian tribes. Good coal exists on the surface, so that it can be obtained without tunnelling. A large part of the country, however, is unexplored, but Canada's remote territories near the North Pole are certain to be extended by her daring airmen.

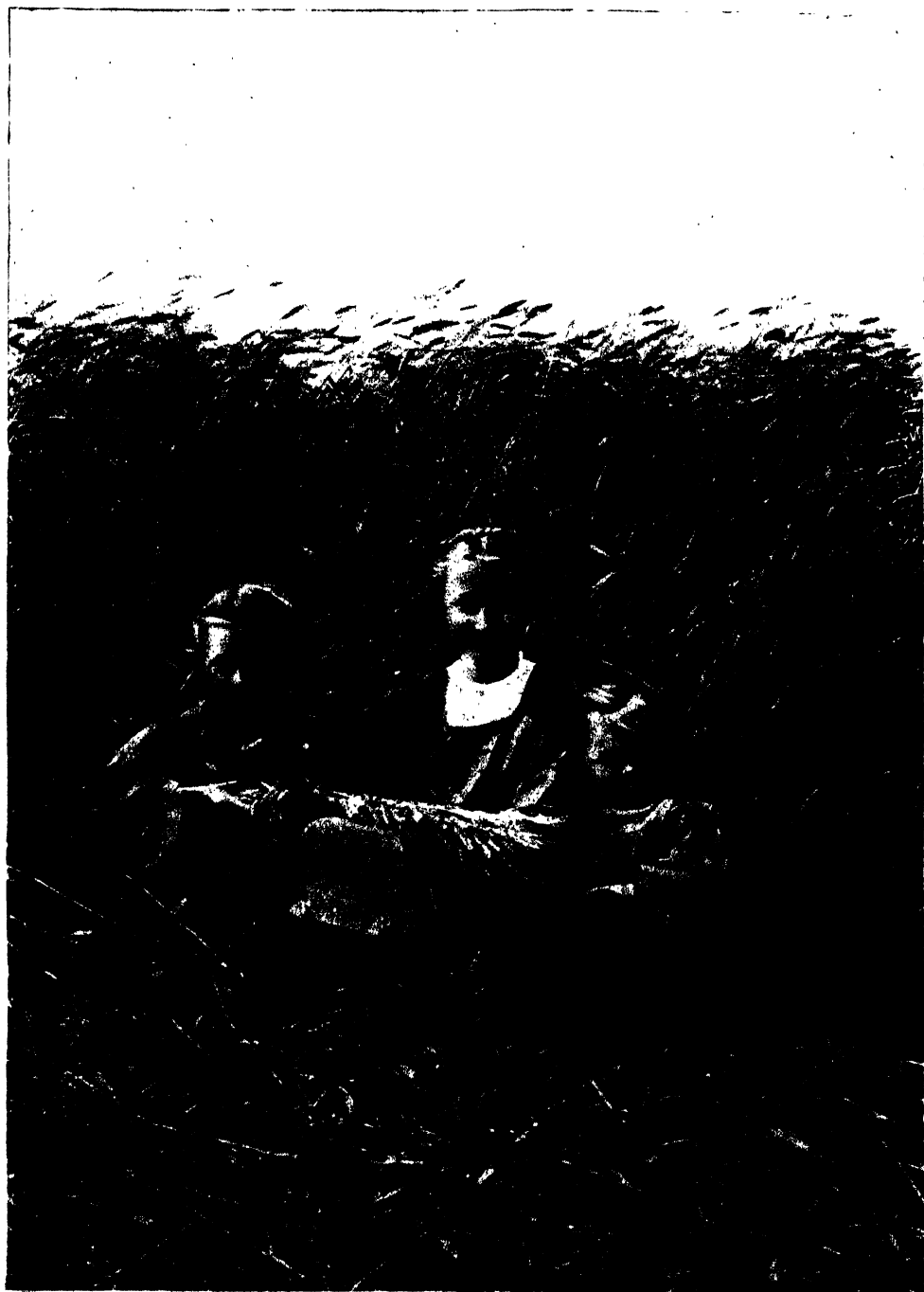
The spirit of the Canadian people is fine and high. It will not flag and soften under the greatest wealth any nation ever won. The Canadian is already the richest man on earth in proportion to his numbers, but, as he has continually proved, he is also one of the readiest to sacrifice himself for a noble end. British Canadians were bred in suffering and poverty. They

went out largely in search of religious freedom or political liberty. At first they fled from the Puritans, who would not allow any creed but theirs to flourish along the Atlantic seaboard, with the result that a steady stream of New England families flowed into Canada during the seventeenth and eighteenth centuries. Then, during the war between Great Britain and the American plantation, a hundred thousand loyalists, seeking to escape political persecution, fled into Canada, peopled Ontario, and brought the wilderness into cultivation. After losing home and fortune, and making a new settlement, they had to fight against the Americans until 1814. Only women were left to work the fields, as the old men and boys, as well as the men in the prime of life, were all called upon to bear arms.

Canada has never forgotten her victorious wars of defence. Although for more than a century she has been friendly with the United States, keeping her frontier unfortified and unguarded for thousands of miles, she retains the spirit of the settlers who came to her in search of religious toleration and political loyalty. The Canadian likes the American, but remains independent. His ambition is to make his vast and varied and fruitful country at least as great as the United States. Very proud he is of the fact that he lives in a land too cold for the production of tropical produce. He has no negro problem. Nature made his country, with its fertilising frost and invigorating air, a good land for white men. When Britain's coal resources are exhausted, and our islands have become the holiday ground of hundreds of millions of oversea men of the English-speaking races, Canada will be the greatest British Power. We are not likely to suffer from land hunger while we have temperate, fertile, healthy continents to populate, and that of Canada, that great, incalculable Dominion, stirs in us the thought that our sea-power, our inventive faculty, and our happy courage have made us in many ways the most fortunate race in history.

CANADA IN PICTURES

Her Dauntless People & Her Boundless Spaces



THE HOPE OF THE DOMINION

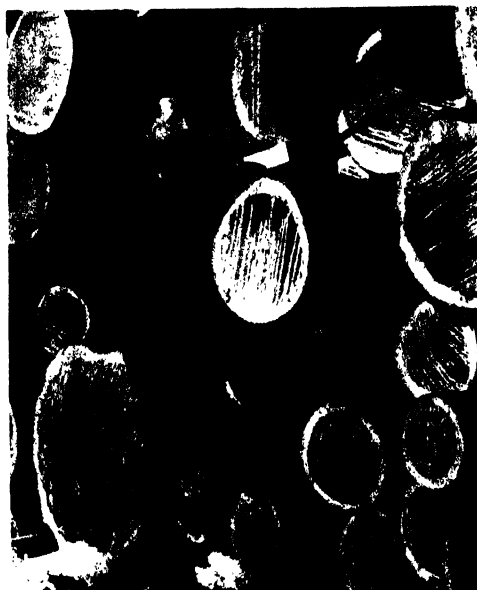
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The Wealth of the Forests of Canada



THE GREAT LOGS COME BOUNDING TO THE WATER



THE SORT OF TIMBER CANADA GROWS IN HER SPACIOUS FOREST LANDS

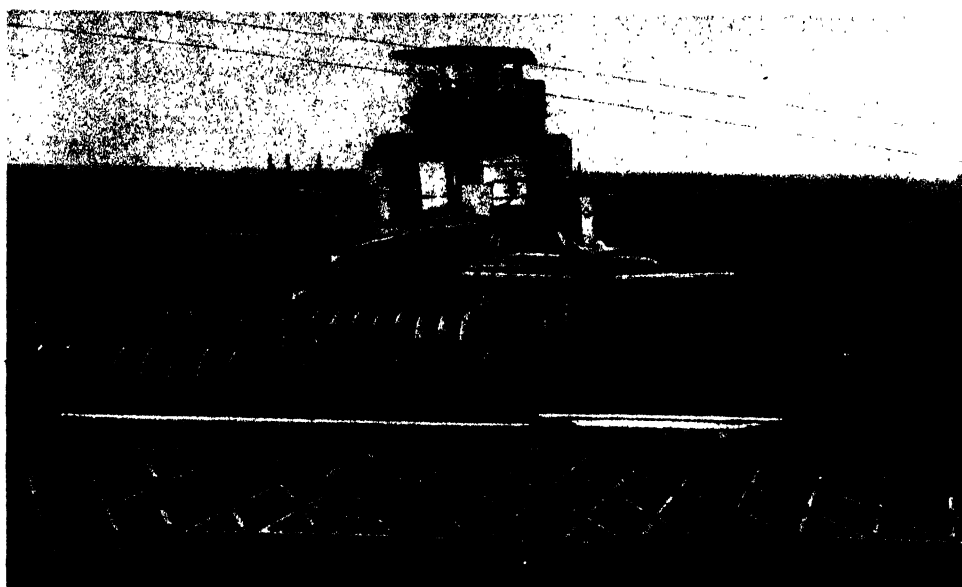


THE LOGS ON THE WAY DOWN THE MONTREAL RIVER

They that Till the Earth Shall Surely Reap



PLOUGHING THE VIRGIN EARTH—AGRICULTURE WITH BRAINS BEHIND IT

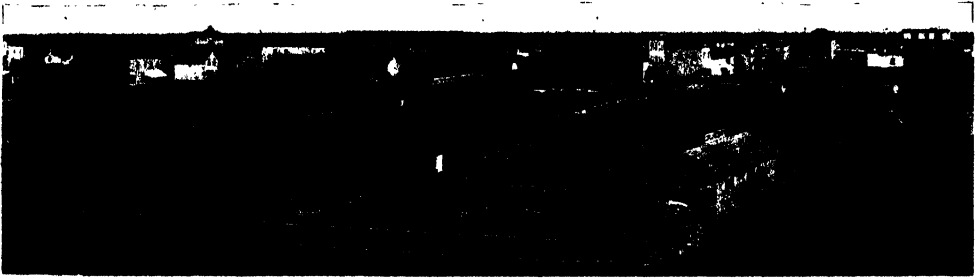


HARROWING THE EARTH—THE POWERFUL LITTLE MOTOR THAT FOLLOWS THE PLOUGH

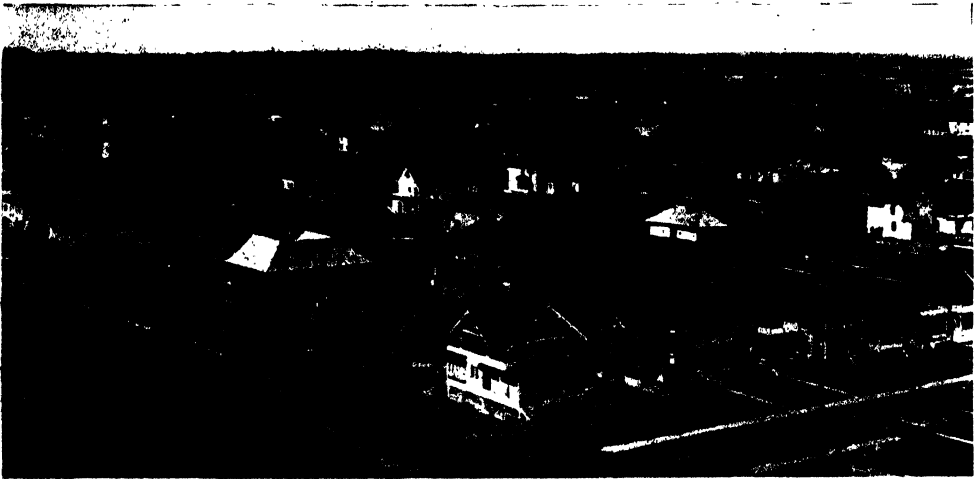


SOWING THE SEED FOR A HARVEST BETTER THAN GOLD

How the Great Towns Grow Up



THE BEGINNING OF THE TOWNS IN THE MIGHTY SPACES OF SASKATCHEWAN



THE PROUD TOWN OF CALGARY GROWS AND GROWS

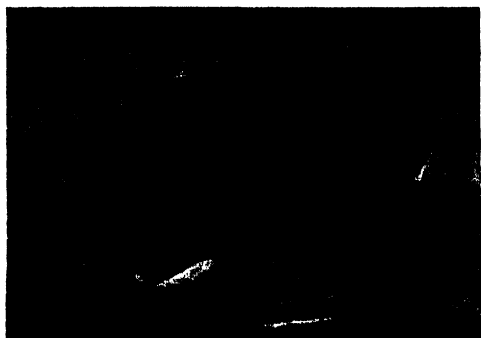


THE GREAT CITY AT LAST—A BUSY CORNER OF WINNIPEG

Little Corners of the Great Farms



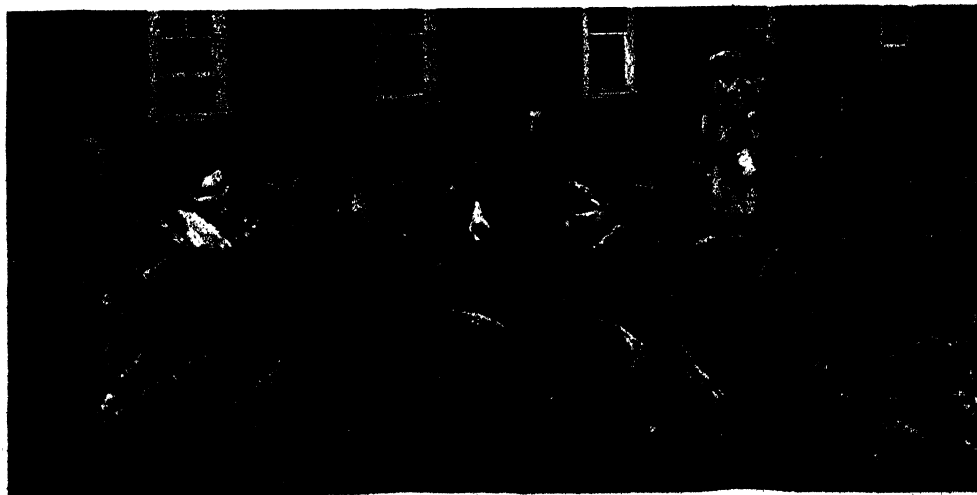
THE GEESSE THAT LAY THE GOLDEN EGGS



A LITTLE FAMILY IN THE GREAT DOMINION

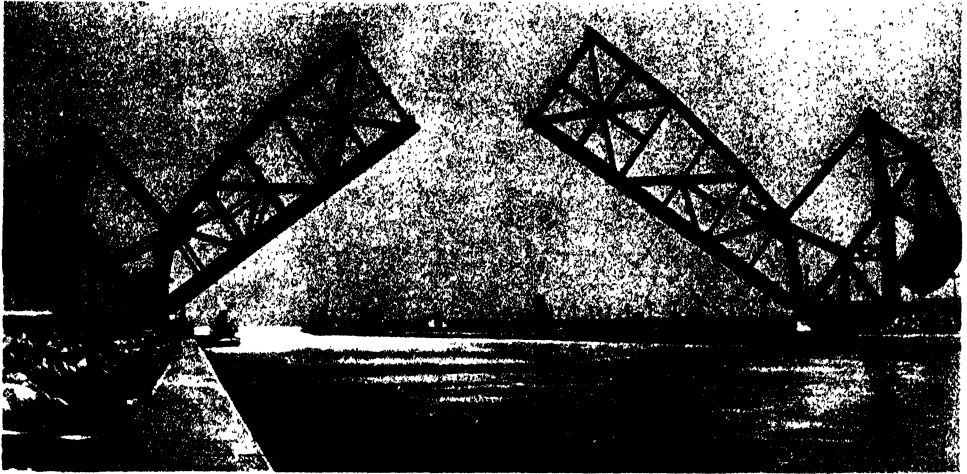


THE NOBLE FRIEND OF CANADA

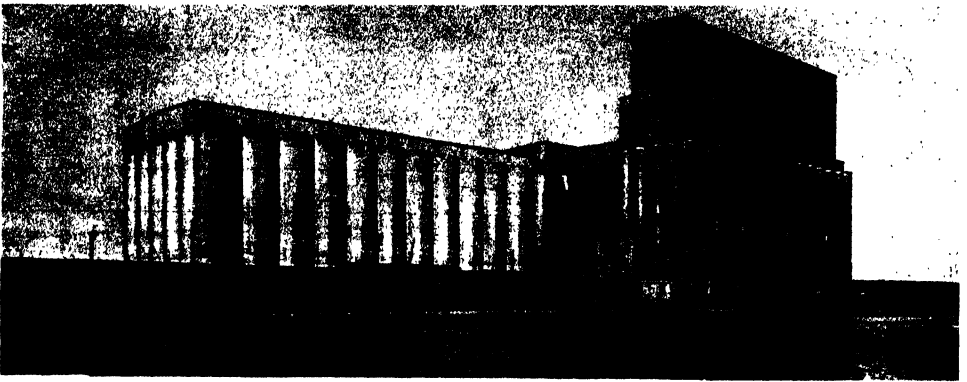


A POULTRY YARD IN A FARM ON THE GRAND TRUNK RAILWAY

By the Waters of the Great Dominion



A BRIDGE OF THE CANADIAN PACIFIC RAILWAY OPENING FOR TRAFFIC ON A CANAL



A BANK OF NATURAL WEALTH—THE LARGEST GRAIN ELEVATOR IN THE WORLD



A POWER-HOUSE IN ONTARIO

Canada as Nature Made Her



THE MAJESTY OF THE MOUNTAIN—THE MIGHTY ROCKIES OF BRITISH COLUMBIA



THE GLORY OF THE FOREST—THROUGH 5000 SQUARE MILES OF STATELY TREES

A Fairy of the Prairies



PLOUGHING THE PRAIRIE

The photographs on these pages are by courtesy of the Grand Trunk and Canadian Pacific Railways, and the Canadian Immigration Department

AUSTRALIA THE GREAT

THERE is a little, mighty mother resting in dim northern seas who has a daughter twenty-five times as big as herself. The little Mother is England; the great Daughter is Australia, the home of the heroes of Gallipoli.

One of the oldest of all lands, Australia is the youngest of all nations. She is the reality of two thousand years of wise men's dreams, the vast southern continent which they thought must be there to balance the land in the northern hemisphere. No one dared seek for her, for they thought that she was separated from the rest of the world by an equator of fire and demons and all-slaying mist.

She *must* be there, they said, and they drew fancy outlines of her on all their maps and globes, and showed her linked up to Africa and to America, and stretching unbroken to the South Pole. But when Diaz staggered round the southern foot of Africa, and Magellan found his way through open water round the southernmost point of South America, and Drake, following, got blown away into the boundless Southern Seas beyond, and none found southern land—then they gave it up, and struck Australia from the map. There could not be a southern continent after all, they said. But Australia was there all the time, with the strangest men and the strangest animals in the world, lying, as under a spell of enchantment, asleep within her borders of pearl and coral and her girdle of salt sea foam.

For long, long years Australia had lain preparing for the coming of man. Her history is written on her wide bosom. Once she was part of greater land masses, connected, perhaps, by land bridges with Asia. Beneath the surface this vast continent was boiling. Burning mountains were heaved up and blew their heads off, and thousands of miles of lava and ash remain to tell the tale of her great volcanoes.

But her fires died out, and more enduring mountains were formed, which, age upon age, epoch after epoch, have been attacked by heat and wind and rain, have been worn down lower and lower, their summits ground by the agencies of time into dust and powder. Their chemical properties, contained in the boiling lava from which they first solidified, were released with the slowly gathering debris, and this highly charged rubble of shattered rock and wind-lashed sand forms today the barren deserts of Australia. But smiling verdure clad the greater part of these, and great forests grew. They sank beneath the sea, and more forests grew, and so forest upon forest changed into coal. Gold and silver, tin and copper, diamonds and other valuable stones, formed in the rocks, and the precious metals tumbled from their beds as the mountains crumbled, forming the great nuggets that have since been found in the soil.

But where were the men? The men were not ready. They had not emerged. But the animals had. Warm-blooded animals which suckled their young had appeared upon the earth, and, roaming far, had reached Australia from other parts of the world. Then came the breakdown of the land bridges from Australia to Asia. The animals were shut up in a continent which had become an island. The kangaroos and the wallabies, the bear-like koala, the egg-laying mammals, and many kinds of reptiles were imprisoned on the continent. These, and great birds which forgot how to fly, were the lords of this vast area of the earth. The animals remained the very lowest type—animals which carry their young in pouches, which have the smallest of brains. There was no competition, no hard struggle for life as in the busier world without, no need to improve. They developed on the old lines. Some grew to be giants, as big as any elephant, and then died out.

THE CHILDREN'S TREASURE HOUSE

The smaller types survived, though, of these smaller ones, the great kangaroo is bigger than the tallest man.

The story of the Australian animals is one of the wonders of the world. The huge continent experiences in its different ranges three climates—tropical, sub-tropical, and temperate, so that we might expect to find there animals resembling those of Africa as well as of Europe. But there is nothing of the sort. There are no lions or tigers, no wolves, bears, cats, weasels—indeed, not a single native flesh-eater except a little so-called cat. There is that, and there is the wild dog, or dingo, but he is a mysterious new-comer, not a native. There are neither apes nor monkeys; neither oxen, deer, nor antelopes; no elephants, rhinoceroses, pigs, camels, horses, hares, or rabbits; no true mice, squirrels, or porcupines; no hedge-hogs or shrews. And yet, lacking all these creatures, Australian wild life is amazing.

A multitude of forms follow the kangaroo line of development; there are what are called kangaroo hares, kangaroo rats, kangaroo mice, simply because they suggest the forms of these originals in other lands. There were no flesh-eaters, other than the so-called cats, in Australia, before white man and the domesticated animals arrived.

The Wonderful Plant Life of the Sleeping Continent

The plant life of the sleeping land was wonderful, too. The great feature here is the eucalyptus tree, of which there are 150 species, many of them unknown elsewhere. Like the animals, they took to being giants, and are often the tallest trees in the world, reaching from 400 to 500 feet. These wonderful giants of the Australian bush are of great commercial importance, for their properties are indispensable, and their wood is invaluable. They yield precious oils and gums, wood the white ant cannot destroy, wood that water will not rot and the deadly ship-worm will not bore. Then there are the wonderful acacias, with their glorious blooms and perfume; and there is the famous bush or scrub which covers hundreds of square miles at a stretch.

But there are flowered scrubs, too; there are trees whose blossoms are so brilliant that they seem to set hills on fire and can be seen miles out at sea. There are trees that have no leaves, and trees that are really giant grasses. There is a mahogany that makes railway sleepers and paves roads; there are palms and figs; there is a mistletoe which is not a parasite, like ours, but a true tree with blossoms of fiery scarlet. All these

treasures of plant and animal life remained locked up in the enchanted land, waiting.

Then from somewhere, we know not from where, men appeared at last, naked, and cannibals. The lowest in the human scale, they lived, and still live, when away from white settlements, much the same sort of life as our old cave men lived in Britain hundreds of thousands of years ago. They had rough flint implements and tools, and their successors have them still; they do not possess houses, unless it be a rude, temporary shanty made of bark or twigs.

The Boomerang Men who Shared the Vast Continent with the Animals

And yet these ancient savages made one of the most wonderful of all natural weapons, the boomerang—the curved piece of wood which, when cleverly thrown, circles strangely through the air, strikes dead a bird or an animal, or, if it misses, returns to the thrower. And these boomerang men, with their tools of flint and their fires made by friction, shared with the animals this continent of nearly three million square miles, stretching 2400 miles from east to west and nearly 2000 from north to south. With this primitive living host for her keepers, the great land slept on; she slept, like Sleeping Beauty, until the prince should come.

The white prince came at last, in tiny ships that blundered by an accident into Australian waters. Magellan's men must have got very near; a Frenchman named Parmentier probably touched part of the coast in 1529, but he thought he had found a greater Java. Spaniard and Dutchman, mainly Dutchmen, succeeded in getting nearer and nearer, but they did not and could not guess the real nature of the mighty land of which they caught glimpses.

The Old Dutchman who Left his Visiting Card at the Door of Australia

Old Dirck Hartog certainly did not know—tough Dirck Hartog, the Dutchman. He could not have realised that he had found the fifth continent when he put a name-plate up at its front door. He did not know the glory of his find. He landed on a little island on the western coast, at the entrance to what Dampier afterwards named Shark Bay, and he set up a rough chunk of wood. On this post he nailed an old tin dinner-plate, on which he scratched this message:

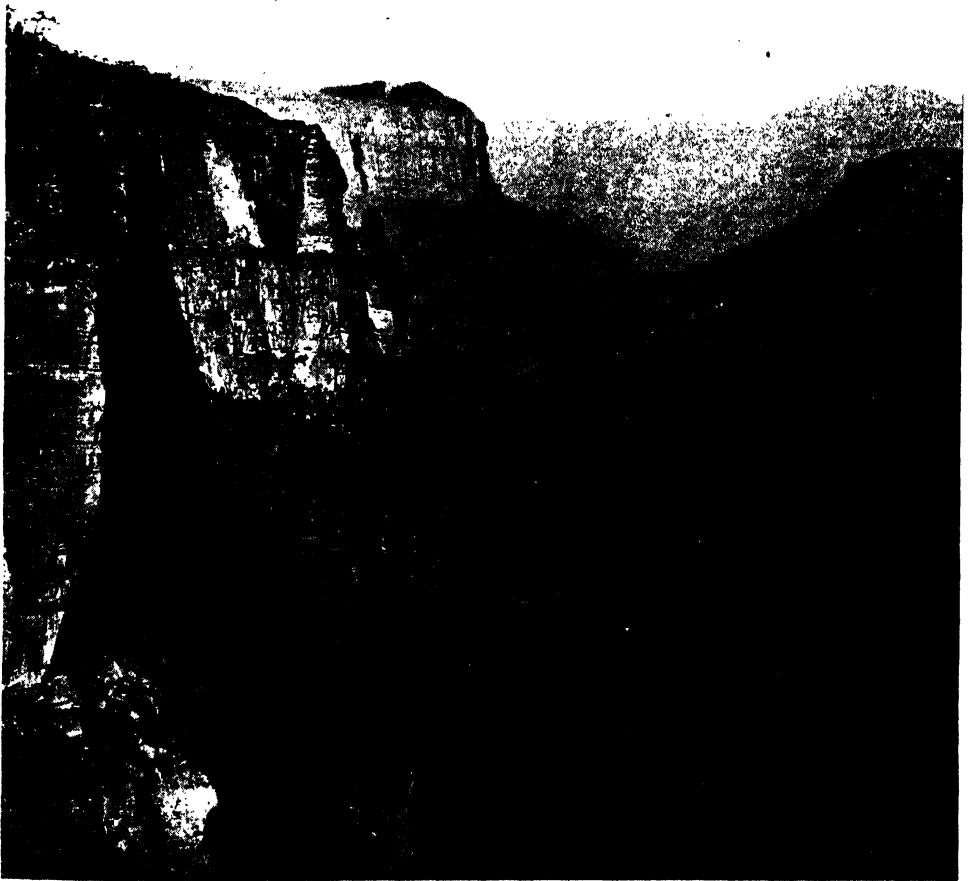
"On the 25th of October, 1616, arrived here the ship Eendraght, of Amsterdam; the first merchant, Giles Mibais Van Luyck; captain, Dirck Hartog, of Amsterdam; the 27th ditto set sail for Bantam; under-

AUSTRALIA THE GREAT

merchant, Jam Stoyne; upper steersman, Pieter Dockes, from Bil. A° 1616."

Now, that is the first authentic document in the history of Australia, a Dutchman's scribble on an old tin plate. Like a traveller's visiting-card, this old tin plate remained nailed up on his chunk of wood for eighty years, until another Dutchman, named Vlaming, captain of the Geelvink, arrived in 1697, and took down Dirck's sign, stuck

ever, at Dirk Hartog Island, Shark Bay. It is curious that old Will Dampier, the Yeovil mariner, did not find Dirck's dinner-plate. He was twice off the western coast, the first time in 1688; the second time, eleven years later, in Dirck's old harbour. Dampier it was who gave us the first real knowledge of the continent. He was the most scholarly, thoughtful man who ever scuttled a ship or sacked a city. He was



THE SPACIOUS BLUE MOUNTAINS OF AUSTRALIA

up a tin plate of his own, and carried Dirck's back to Holland, where it has recently been discovered, nearly three centuries after it was inscribed, safe and sound in the State Museum of Amsterdam. Vlaming's tin plate remained until 1804, when the French ship *Naturaliste* put into Shark Bay, discovered the old post toppled over and eaten away, and the tin plate half buried in the sand. Dirck's name is on the map for

buccaneer, pirate, brigand, all things by turn, but he was, above all, a born, romantic voyager, whom you could fancy saying:

Push off, and, sitting well in order, smite
The sounding furrows; for my purpose holds
To sail beyond the sunset, and the baths
Of all the western stars, until I die.

It was he who cast Alexander Selkirk on to a desert island, and it was he who went

THE CHILDREN'S TREASURE HOUSE

four years later and fetched him away. Alexander Selkirk's adventures are set forth, for ever immortal, in the life-story of Robinson Crusoe. Dampier stayed three months in Australia on his first visit, and thought the land and its people horrible. But he published a full description of what he had seen, for he was a splendid writer, this strange old pirate, who would sack a city and then turn with rapture to gaze on a flower or to look with wonder at a little bird.

How the Government Realised Australia After it had Lost America

But of course the practical discovery of Australia dates from the great voyage of our immortal Captain Cook in 1770. He saw the eastern side, the fertile, smiling side; the others had seen the frowning west. It happened that with him there was Sir Joseph Banks, a man of riches and ideas. They landed at an inlet which was so fair with flowers and verdure that they called it Botany Bay. They took home glowing reports of what they had seen of the land which, under the name of New South Wales, Cook had claimed on behalf of the British Empire. Was the new continent welcomed? No. We gave up countless lives of men to win India. We turned the world upside down to win Canada; but Australia we made into a *prison*. We had just lost the United States, and it was first suggested that the Britons who had remained loyal to us there and suffered for our sakes should be settled in the new continent. The idea was not carried out, but the suggestion of Sir Joseph Banks that the southern land would make a good convict settlement was unfortunately adopted.

How the Bad Laws of England Made a Prison of the Continent

This is what had been happening. England had terribly severe laws. She used to hang people for the theft of a horse or a sheep; she used to send them in irons to the American plantations for stealing a bit of linen. Now, however, convicts could not go to America, and so they were sent to Australia. That is how the colonisation of Australia began. A continent was taken over by the nation to be a prison settlement for convicts, because it was a cheap way of getting rid of them, cheaper than building new prisons, excellent because the land was so far away that the convicts could not get back.

The man to whom the task of taking out the first Australian colonists was committed was Captain Arthur Phillip, a brave sailor, born in 1738, so that he was nearly fifty, in

the very prime of his mental vigour, when he set forth. It took him two years to make arrangements for the voyage, for he had to deal with a stupid Government and an Admiralty even more stupid. He succeeded in getting his way in many things, but not in all. We cannot go into the details here, but one thing we may note. This new land, today a sanctuary of freedom, was to be governed and administered with laws made for prisons. But Captain Phillip had seen the frightful havoc of the law. He knew that England was hanging over a hundred poor wretches every year for petty theft, and he saw that this severity increased crime instead of diminishing it. He did not believe, therefore, in capital punishment for light offences, and he made an amazing suggestion. He asked that the question of penalties in Australia should be left to him. He did not think it would ever be necessary to inflict the death sentence, but, if the extreme penalty should be really necessary, he said, "I should wish to confine the criminal till an opportunity offered of delivering him as a prisoner to the natives of New Zealand, and *let them eat him!*"

The Adventure of the First Fleet that Sailed to Australia

Australia, in the year 1915, launched the first cruiser she has ever built, the *Brisbane*. Its tonnage is about one-third greater than that of the whole of the first fleet which sailed to Australia. There were two little frigates, there were six ships carrying convicts, and there were three little vessels conveying stores. On board these there were just short of two hundred officers and men of the Marines, who were to remain on land as guards; there were 26 wives of Marines, and twelve of their children. What of the colonists proper, the convicts sent out for the term of their natural lives? Of these there were 565 men, 144 women, 6 girls, and 5 boys. The good cruiser *Brisbane*, when she is finished, would steam home to us in less than a month, but the first fleet took eight months to go out.

A terrible time these ships had. In spite of all Phillip's precautions, the women were sent off without a change of garments, and there was not a single round of ammunition for the muskets; a serious thing, seeing that the convicts mutinied before the ships were out of the Channel. But Captain Phillip overcame all difficulties, and got his little ships to the other side of the world, where, on January 18, 1788, the fleet entered Botany Bay. Alas for Botany Bay's fair promise! In place of the bright flowers and

THE QUAINI ANIMAL LIFE OF AUSTRALIA



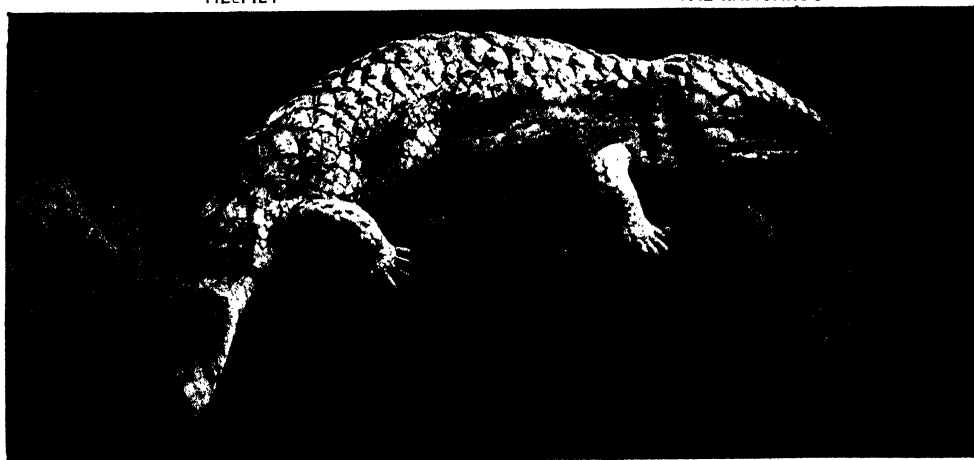
THE BLACK WALLABY IN THE BUSH



THE FLIGHTLESS CASSOWARY WITH ITS CURIOUS
HELMET



ONE OF THE OLDEST INHABITANTS OF AUSTRALIA
—THE KANGAROO



THE STUMP-TAILED LIZARD WITH ITS ARMOUR OF ROUGH, HORNY SCALES

THE CHILDREN'S TREASURE HOUSE



THE DOOM OF THE FOREST TREES—CUTTING TIMBER FOR THE LUMBER MILL

green grass that Captain Cook and Sir Joseph Banks had seen, poor Captain Phillip found only sand and swamp, and the vegetation all burnt up by the scorching summer. Failing to find a place ready for settlement, he had to go out in boats and explore the coast to the north. He was successful, for, turning a headland, he ran into the wonderful bay which is named Port Jackson. "We got into Port Jackson early in the afternoon," he wrote, "and had the satisfaction of finding the finest harbour in the world, in which a thousand sail of the line may ride in the most perfect security."

On the fourth day after the landing, one of the most dramatic things in history happened. The English ships were making their way cautiously out of Botany Bay, when, lo! towards them came two great ships a-sailing, bearing the national flag of France. The ships were the *Boussole* and *Astrolabe*, and were under the command of Count de la Pérouse, the greatest traveller France ever produced. He had come to Australia to hoist the French flag over the new continent in the name of France, but he found himself forestalled, by just four days, by a British captain and a little company of scallywags. La Pérouse was there with the best equipped expedition that had ever been sent out—astronomers, naturalists, philosophers, artificers, skilled mechanics—but he had been beaten in the race by a mob of scarecrows, of whom the women had not so much as a change of linen, of whom the men could not be trusted even to refrain from robbing each other.

An empire's fate was in the balance, and this company of convicts, creeping in their little ships out of the desolate bay into which the French were sailing, turned the scale for Britain.

La Pérouse, a perfect knight of chivalry, took his defeat with good grace. He spent pleasant days in company with Phillip and his officers, and left with him, for despatch to France, the account

AUSTRALIA THE GREAT

he had written of his voyage. Then he sailed away, to break his gallant heart on a coral island, to dash his two ships to pieces, and be lost for evermore in the raging waste of waters. From the day that he left Captain Phillip, not a word was heard of him for forty years, though his ships were sought in every sea. At last they were found, two dismal wrecks on a coral reef off Vanikoro, north of the New Hebrides.

But now our colonists were landing; civilisation was knocking at Australia's door. It was a sort of civilisation, rather sadly furnished. The farming implements sent by the Government were quite inadequate, and the seed for food-crops had for the most part been spoilt on the way through overheating. The governor had asked for farmers, but the only man in the company who knew anything about farming was his own servant. And so agriculture went wrong at the outset. A few cattle and sheep had been brought, but the cattle ran away into the distant wilds and were not found until several years after. All but one of the sheep were killed by lightning. The colonists themselves were of a mixed type. A great number were not criminals at all, except in the sight of our fiendish laws. There were poor fellows who had been branded for life for knocking over a rich man's pheasants; there were others doomed for life, with their children, for petty theft. But, as Captain Phillip remarked, there were some "very complete villains," and these exerted a terrible influence on the others.

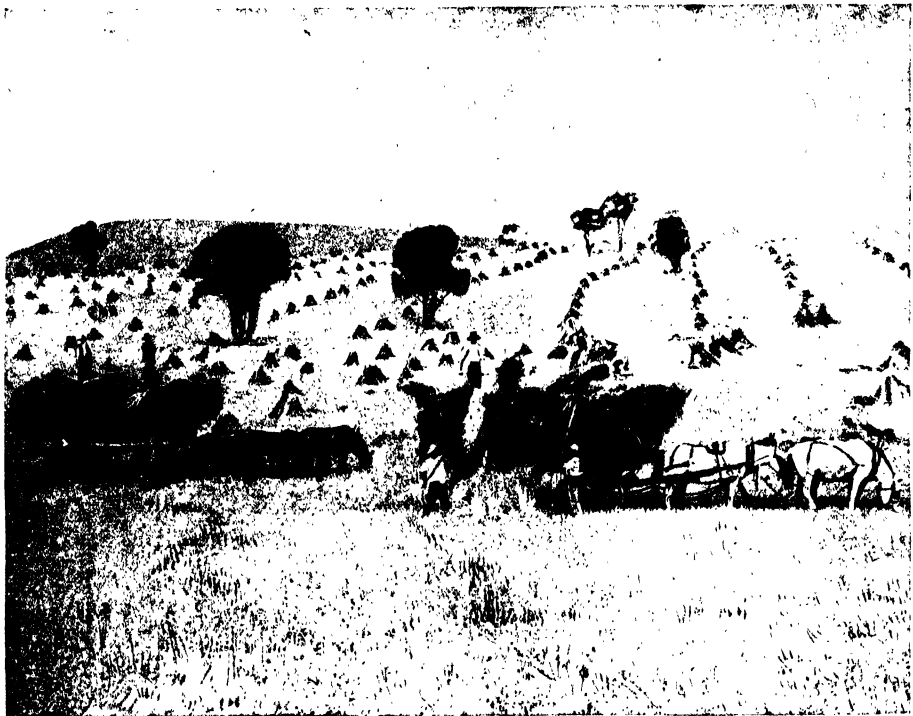
Crime and idleness manifested themselves, very serious crime, which the military should have suppressed, but they did not; and friction occurred between Captain Phillip and Major Ross, the military commander sent out to help him. Ross was the first great enemy of the colony, a stupid, cross-grained man, who resented the authority of the governor, and became his personal enemy. He set his men a shameful example of disobedience



HOW THE NATIVE AUSTRALIAN CLIMBS A TREE

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GATHERING THE GREAT HARVEST IN AUSTRALIA



CARTING WHEAT ON A BIG FARM IN NEW SOUTH WALES



REAPING TIME IN A WHEATFIELD IN TASMANIA

HOW THE MALLEE COUNTRY WAS CONQUERED



PLOUGHING A HUGE FIELD IN NEW SOUTH WALES WITH SPECIAL DISC PLOUGHS



BREAKING UP ROUGH GROUND WITH A GREAT IRON ROLLER DRAWN BY CATTLE

THE CHILDREN'S TREASURE HOUSE

and defiance of Phillip's authority, and poor Phillip, in spite of his horror of the system, had to set the executioner to work.

A serious problem in empire-building was before him now. Here he was, with over a thousand people, inhabiting a corner of this unknown continent, a corner less than twenty miles square, and all untilled. Sydney, as he had named the settlement, was rocky, and he could not find a way into the interior. The spell of enchantment lay upon him, as it had seemed to lie upon the land. Australia has her mountains near the coast, and he could not find a way through to the fair beyond. Gorges and passes which seemed to point the way ended in precipices a thousand feet high. A little new land and a river he found, but that was all.

Terrible times followed. The ships had set out with a two years' supply of food, the expectation being that the colony would soon become self-supporting. But it did not. The governor sent away some of his worst convicts to Norfolk Island; he took the guns out of his frigates, and sent them with store ships to distant ports for food.

The Great Hope of the Brave Captain Who Believed in Australia

In his attempts to find a way through the mountains, Captain Phillip came in touch with the natives, to whom he behaved with great nobility. The rest of the colonists did not; they robbed and murdered the black fellows, and the natives retaliated. One of them threw a spear, which went through the governor's body. Phillip was very ill for ten days, and then the first thing the generous fellow did was to go in peace and friendship to the tribe whose chief had wounded him, and show that he bore no ill-will.

But starvation was threatening the colony. Supplies had to be cut down, with the result that disease broke out among the convicts, and made the colony one great hospital. A little food came back on one of the ships sent out in search of it, but it only temporarily eased the situation, and the poor convicts thought they had been carried half-way round the world to die of starvation in a grim and awful prison land. Many escaped into the bush; some of them, ignorant of their true situation, set out to march to China, which they believed to be only 150 miles away.

And, as food diminished, robberies increased. The whole colony was put on starvation rations, and, lest the poor wretches should eat heartily at one meal and

leave nothing for the coming days, Phillip served out food in small portions daily. Men, as they came away with their meagre supplies, were seen to drop dead in the street. One of the ships sent away was wrecked. Nearly three years passed without any relief from home, and yet Captain Phillip did not despair. He gave up his own private supplies; he shared equally with the meanest convict; and when things were at their blackest he could find it in his great heart to write: "The little difficulties which we have met with, time and proper people for cultivating the land will remove. This country will prove the most valuable acquisition Great Britain ever made." He was already crying out for free men and women for the colony!

The Terrible Days when Australia was Threatened with Starvation

He caused a flag to be run up at the entrance to the harbour, so that any passing ship might see it and bring them relief, as if they were a shipwrecked crew. And, to the frantic joy of all, a ship did come in. She brought a small quantity of stores, but she brought also 222 female convicts to share them. It seemed as if fate were against the colony, for a ship despatched earlier with supplies from England had been sent to the bottom of the ocean by an iceberg, in the warm waters off the Cape of Good Hope. When the ships the governor sent forth returned with food, they were immediately followed by vessels from home, which had set out with a thousand convicts, had lost 270 on the way from disease, and landed 488 at death's door.

With them came a new curse, the New South Wales Corps, to relieve the Marines. This was a volunteer corps of military men whom no regiment in England would accept. They went out as soldiers, and their duties were those of warders, but their object was solely to make money by any base or ignoble means. They acquired land, they had convicts for servants, and they introduced rum as payment. They imported rum at four or five shillings a gallon, and sold it for money or for service at £8 a gallon. The results were appalling.

The Soldiers of the Old, Old Days Before the Anzacs Came

Convicts already maddened by misery were rendered worse by drink; murder and robbery multiplied; frightful outrages were committed against the blacks. The evil began in Phillip's time, but it grew far worse in later years, until the blackguardly corps was disbanded in disgrace, and real

THE STRANGE PAST THAT STILL LIVES IN AUSTRALIA



THE QUIANT DANCE OF THE FORKED STICK—HOW THE NATIVES OF QUEENSLAND OFFER PRAYER FOR SOMETHING THEY GREATLY DESIRE.

This curious ceremony, accompanied with much singing and clapping of hands and beating of boomerangs, is known as the corroboree

THE CHILDREN'S TREASURE HOUSE

soldiers sent out to take their place. Captain Phillip retired from office in 1792, much to the regret of everybody of worth in the colony; even Bennilong, the native chief who had stabbed him, asked to be allowed to accompany him home. He left behind him an impression of energy, self-reliance, humanity, and firmness which had a lasting influence in spite of all that happened, and we owe this splendid man thanks and praise still for the wonders he achieved.

The Travellers who Found the Way Through the Unknown Continent

But he left behind him, through no fault of his, a continent tenanted by a very bad sample of humanity, and it was long before the fortunes of Australia took a change for the better. The great difficulty was that at first very few free settlers went out. But, as free men began to arrive at last, it became necessary that they should grope towards the back of beyond. Coast exploration was carried out by Bass and Flinders, two fine fellows, of whom the first is believed to have died a prisoner in the mines of Chile, while Flinders was long a prisoner of the French, who stole the plans of his coast surveys, altered the names to French titles, called the whole "The Territory of Napoleon," and intended to colonise it.

Fears of the French hastened our own settlement of the new colonies, but at present the difficulty was to make the most of what we had. It took a quarter of a century to find a way through the Blue Mountains, which confined the settlers to the New South Wales seaboard, but, once a way through was discovered, glorious vistas opened out for pasture and crops. Still, the difficulties were only beginning. Since the passage of the Blue Mountains, *hundreds* of exploring expeditions in all directions have been carried out, and the story of these journeys are among the most terrible and most inspiring in human history.

The Sad Story of the Men Who Wandered to a Lonely Death

Again and again disaster befell them. Men were murdered by natives; they wandered into the wilds and have never to this day been seen or heard of again, though scores of men have searched for them. Men like Burke and Wills have wandered on to death in the frightful barren wilderness of stone, sand, heat, and waterless torture. These two perished through a blunder. Their relieving party came up to the spot at which they should have met, committed a hideous mistake by wandering off with the stores, and left their two leaders to arrive, seven

hours late, to die of thirst and starvation where they should have found plenty. The bodies of Burke and Wills were found, with their pitiful diaries—diaries as moving as those of Captain Scott, but written in a blazing land instead of a freezing land.

Tragedies such as these, however, only inspired other men, and, though the routes from shore to shore, from east to west and from south to north, are marked by dead men's bones, those routes are trails of imperishable glory of these pioneer heroes.

Little by little the mysteries were solved. Some men found swamps and floods where in another season men found reeds and salt-pans. Some men found rushing rivers which were missing at other times. The land behind the coastal mountains slopes towards the centre, and rivers fed by the mountain snows and torrential rains lose themselves, in dry seasons, in the sand of the interior. Men thought for long that there was a great inland sea in Australia, but they were wrong. There are vast underground lakes, but in many places the water, when it is brought to the surface, is so highly charged with chemical products, washed out from the crumbled ruins of bygone granites, that it is quite undrinkable.

The Great Change that Came at Last with the Spirit of Freedom

But good was found with evil. Millions and millions of acres of good land were discovered, and free settlers began to arrive in growing numbers. As they came in and settled, and took a voice in the management of their homes, they protested against the introduction of more convicts. The desire for the reform was not unanimous, for many of the squatters, men with large ranches, needed the services of the convicts, other sources of labour not existing. This disunion naturally affected the attitude of the Government at home, never too alert in seeing things from the point of view of the free-born, free-living, freedom-loving Briton overseas. A glance at the position of New South Wales, the parent colony, in 1836 gives an idea how far progress had proceeded. The population consisted of 32,000 freemen, 17,000 emancipated convicts, and 28,000 convicts under sentence. One after another, new colonies came into existence on the continent: Queensland in 1825, though not a separate colony until 1859; Western Australia in 1829; Victoria in 1835, separated as a colony in 1851; and South Australia in 1836. Tasmania, the island State, was colonised in 1803, but was a penal settlement until 1852. Three years

A MAN SITTING IN A BIRD'S NEST



AN AUSTRALIAN NATIVE DIGGING EGGS OUT OF THE ENORMOUS NEST OF THE BRUSH-TURKEY

DEVELOPING THE RICHES OF AUSTRALIA



THE GREAT IRRIGATION SCHEMES BY WHICH NEW AREAS OF AUSTRALIA ARE BEING OPENED UP



MECHANICAL POWER ON THE GREAT AUSTRALIAN FARMYARDS

AUSTRALIA THE GREAT

later it was the first Australian colony to receive representative government. Those are the original six States which today are federated together as the Australian Commonwealth. For very many years the tide of convicts has ceased. In place of a few thousand convicted poachers and political prisoners, we have sent farmers, miners, soldiers, artisans, skilled men of all trades and callings.

The discovery of gold gave Australia the great prize which attracted the world. In 1849 a young Englishman named Edmund Hammond Hargraves, who had gone as a

bearing prospectors. Gold was found in scores and scores of places. The population of Australia went up by leaps and bounds. That settled the convict question. There were enough free men and women now, and the free and independent miners, and the free and independent traders who followed them, would have no more human rubbish. They actually refused to admit the last two shiploads of our gaol scourgings. All honour to them for their mutiny.

So gold assured at last the success of Australia, for it drew a population, of whom enormous numbers settled down to



HOW CIVILISATION COMES TO THE LONELY PLACES—THE BEGINNING OF A HOMESTEAD IN AUSTRALIA

youth to Australia, was drawn to the Californian gold-diggings. He noticed that the geological formation from which he was getting his American gold exactly resembled the rocky gullies he had seen in Australia. So he went back and hunted; he crossed the seas to test a theory, and he did find gold. He found it in the Blue Mountains of New South Wales, on February 12, 1851, and within a month he found more and more gold in every creek for seventy miles. He reported his discovery to the Government, and the news flew across the world. Ships from every sea came to Australia,

agriculture and to trade, which will outlast all the industry in precious minerals. There have been reverses. Heavy droughts have parched the land, so that sheep, dying of starvation, were sold at sixpence a head for tallow; there have been periods of desperate floods in other places. But so rich and abundant is the land that recovery from calamity is as rapid as calamity itself.

The finest sheep, the finest cattle, the finest fruit and other trees, have been taken to Australia, and have multiplied enormously. Rabbits, of which half a dozen or so were turned loose, have become the

THE CHILDREN'S TREASURE HOUSE

great plague of the farmers, costing millions of pounds. Foxes, introduced for sport, have run wild and become a terror of sheep-owners; the Scotch thistle, the English sweet briar, and the English sparrow have all in turn played their part as plagues. But, in spite of all, Australia goes on and thrives, a lovely, still mysterious land, a land of enormous distances, the only continent under the government of a single nation.

The Immense Spaces Still Waiting for People in Australia

According to the figures at the beginning of the Great War, the population of the Commonwealth is nearly five millions, and they are among the happiest people on the earth. Their land is the land of the golden fleece, for they have 85 million sheep, whose wool alone produces from 12 to 14 million sovereigns a year in the markets of Great Britain. They send us meat worth £7,000,000 a year, butter realising over three millions, and wheat worth over four millions. Altogether we take from them between thirty and forty million pounds' worth of goods in a year, and send them back nearly fifty million pounds' worth.

All this splendid activity results from the peopling of what amounts to little more than the rim of the continent. The big cities are all within easy distance of the coast; none are really inland. A glance at the area and populations tells its own tale. New South Wales, with 309,460 square miles, has 1,855,000 people; Victoria, with 87,884 square miles, has 1,420,000; Queensland, with 670,500 square miles, has 680,000; South Australia, with 380,070 square miles, has 440,000; and West Australia, with the immense area of 975,920 square miles, has only 325,000 inhabitants. Tasmania is a separate island, and so the comparison is not quite the same, yet it has only 197,000 people for its 26,215 square miles.

The Splendid Achievements of a Nation Marching to Peaceful Conquest

Of course, much of Australia will never be cultivated, owing to desert conditions, but thousand and thousands of square miles are awaiting human conquest. The railway will bring victory. So far, Australia has about 20,000 miles of railway running. She has constructed a trans-continental line from Port Augusta in the south to Kalgoorlie in the west, nearly eleven hundred miles; and she is building a second over 1,000 miles long from north to south at the narrowest point. Think of the distances, and then realise what the wireless telephone will mean to this great continent. Already wireless tele-

graphy connects the big cities of all the States, and saves the continent millions of pounds in wires and poles and labour.

Railways and water are the twin problems before Australia. The rivers evaporate in summer, or sink into the land, but deep wells will bring up, and are bringing up, the sweet waters from below. Well-sinking is going forward at a great rate, and the damming of waters in flood-time is progressing splendidly, too.

Australia's prosperity increases with every gallon of water saved or pumped from its hiding-place beneath the surface, and with a railway to travel on, with a dam to catch the floods, or a well to bring water from below, Australian life will go further and further inland, regulating the deluge of the rainy days and laughing at the scarcity of drought. The Australian can go inland and dwell, in the wilds among the primeval animals, monarch of as many miles as he surveys. He is doing so more and more. Distance means little to him. One little home may be three or four days' ride on horseback from the next little home, but we know that each prosperous farm of today will tomorrow be the heart of some fair city marked on the maps of our children's children.

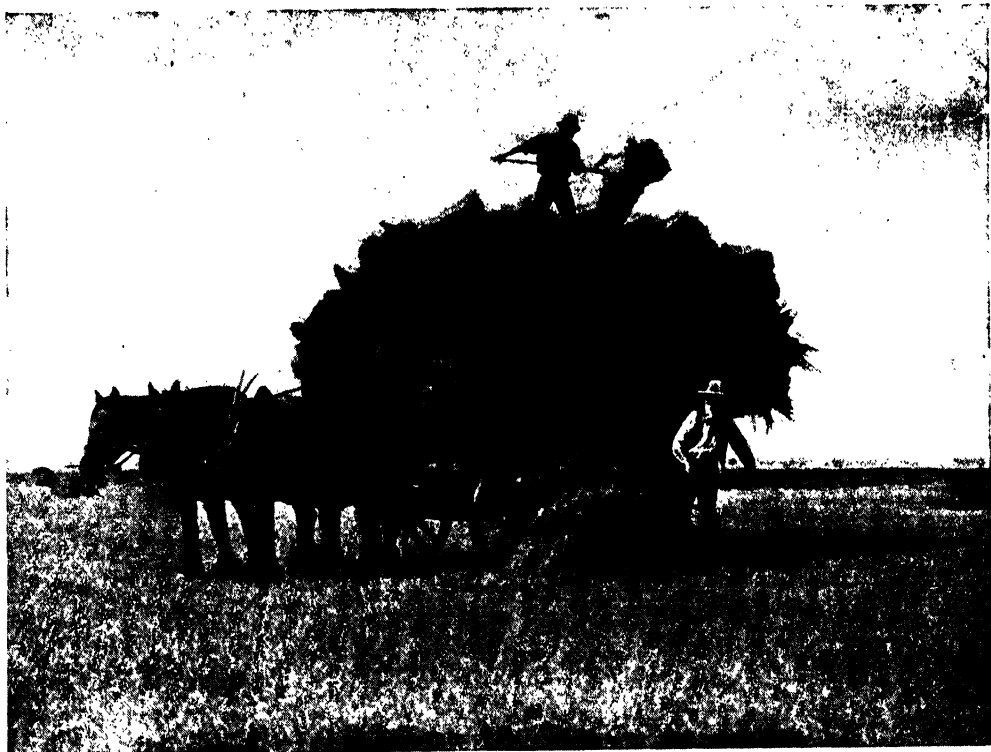
The Pride of the Sorely-tried Mother in Her Growing Daughter

Cinderella has come indeed into her own at last, and the Mother in the wild North Sea is proud of her. Those heroes who have won imperishable glory for the cause of humanity in the Anzac zone of Gallipoli are Australians and New Zealanders, most of them born in our mighty daughter continent; they have given a new word to our language, for "Anzac" is simply the initial letters of "Australian and New Zealand Army Corps." Slowly but surely Australia has won her place in the Empire. Once we should have been glad to say to her, "Govern yourself, by yourself, for yourself," but that was in the bad old days of British statesmanship, and Australia's answer was, "If you don't know when you have got a good daughter, I know when I have a good mother, petulant as she is."

Now, proved in adversity, we both know, and never have mother and daughter been drawn more closely to each other than the proud, sorely-tried Motherland of the North Sea and the children of her great Dominions under the Southern Cross.

And so, in these days, when this great continent is so near and dear to us at home, we echo the prayer that comes upon the southern wind—ADVANCE AUSTRALIA!

THE WIDE HARVEST FIELDS OF AUSTRALIA



HARVEST HOME IN THE WIDE CORNFIELDS OF THE COMMONWEALTH



THE GREAT WHEATFIELDS OF THE CONTINENT WHOSE EARLY INHABITANTS WERE IN WANT OF FOOD

THE CARRIERS BEFORE THE RAILWAY CAME



GOODS TRAFFIC



A SURVEYING PARTY'S CAMP ON THE GREAT RAILWAY TRACK



THE CHARIOTS OF THE BUSH—THE WAY THEY WENT BEFORE THE LINE WAS LAID

THE DAUNTLESS MARCH ACROSS AUSTRALIA

*They were the First that Ever
Burst Into that Silent Land*

OF all the tales that Time will yet unfold, none will be more thrilling than the story of Australia.

IT sounds familiar in our ears to-day, and the Island Continent has leapt into a great tradition. Its Anzac men have clothed it in immortal fame. Its flag has floated in the breeze on many a battlefield for liberty. It stood in the front line of humanity through all those years when Europe was fighting for its life.

YET what we know of Australia is little indeed compared with what we do not know; and the greatness of Australia now is small indeed compared with that illimitable future that is opening out. She stands where America stood a hundred years ago; in less than a hundred years to come will she stand where America stands?

SHE has resources almost beyond our dreams—such natural wealth as little English islanders can hardly imagine. The few millions of people inhabiting this continent hold in their hands the destinies of one of the rarest and fairest of all the gardens of the fruitful earth.

THE LONELY ADVENTURE OF EDWARD JOHN EYRE

WHEN Edward John Eyre, nearly eighty years ago, made his wonderful journey of more than a thousand miles from east to west along the shores of the great Australian Bight, the southern interior of Australia was as unknown and as unvisited as the wastes of the Antarctic.

TODAY they live on the edge of this great continent, and civilisation circles round the coast. But civilisation is creeping on. The great steel line that runs in front of it has just been laid across Australia from east to west. It is going to be laid from north to south, and the vast interior of the continent, these boundless spaces, will be linked up with the hives of industry, the scene of the lives of great populations, the homeland of a nation that will live on and on into the years of a true Great Peace.

ALMOST unknown are the vast spaces in the heart of Australia, almost untenanted save for such tribes as move about from place to place, and such wild life as finds its sanctuary there. Almost within living memory come the men who blazed the trail that the railway follows.

HERE let us read their story—the story of these brave and lonely men who risked their lives and all to make a pathway through this mighty land. The first trains are running in their track; we will see how they went in those days of long ago when railways were a dream.

Forrest, going from west to east, followed Eyre's trail 29 years later, but that thousand miles was still a trackless desert, practically devoid of surface water, and looked upon by the colonists as a southern Sahara.

Five years elapsed, and then Giles, in 1875, made his journey with camel

THE CHILDREN'S TREASURE HOUSE

transport for nearly 2600 miles, travelling much farther north. He had made two previous attempts to cross with horses, in one of which he lost his companion, who disappeared in the wilderness and was never seen again.

Of the three, Forrest alone, 47 years after his own great journey, lived to see a ribbon of steel running between Eyre's trail and his own on the one hand, and Giles's on the other, linking up a continent, and making that desert where Eyre and himself and Giles had all but perished blossom like the rose.

Let us follow the trail of these intrepid men. The story is an inspiring one. The romance of the great East-to-West Railway—which in places crosses that trail—will lose none of its glamour in the telling.

Edward John Eyre, first of the great Overlanders, left Adelaide in June, 1840, in charge of a South Australian expedition to explore the country to the north of Spencer Gulf. In his own journal Eyre speaks of it as a failure. If indeed it was, then no journey of exploration can be said to have been a success; but we are only concerned here with another journey—the passage he forced with horses along the forbidding shores of the Bight.

In February, 1841, he had come to the conclusion that further exploration north was not practicable, and when he had reached Fowler Bay he wrote to his friends that, with his three native boys and Baxter, his overseer, he intended to proceed overland to King George Sound as soon as his horses were in a condition to attempt the journey. He had originally intended to send the *Hero*, the boat put at his disposal by a committee for the original expedition, across the Bight to Cape Arid with stores and equipment, but had to abandon this plan as the South Australian authorities would not allow the boat to go beyond South Australian waters.

He made no attempt to conceal from Baxter the desperate nature of the enterprise, pointing out that 850 miles of unknown country lay before

them, none of which had probably ever before been trodden by man. But Baxter was undismayed. Come weal, come woe, he would remain with his leader to the last, and accompany him westward at every hazard.

On February 25, 1841, with the devoted Baxter and three natives as his sole companions, he began his journey into the unknown. He took with him nine horses, one Timor pony, one foal, six sheep, nine weeks' supply of flour, tea, and sugar, and a little water. It was the height of summer. The sand was a constant torment, and swarms of March flies bit them cruelly.

They got into an arid stretch of country at the outset, and, but for the water carried by the pack-horses, would have perished then and there. They traversed 135 miles of desert without a drop of surface water. The horses went without a drink for five days, the sheep for six. So exhausted were the unfortunate horses that all baggage had to be abandoned, except a single spare shirt and a pair of boots and socks, some blankets, and the things the explorers stood in. Pack-saddles, horseshoes, water-kegs, the bulk of the firearms and ammunition—even their medicines and a book—were remorselessly sacrificed.

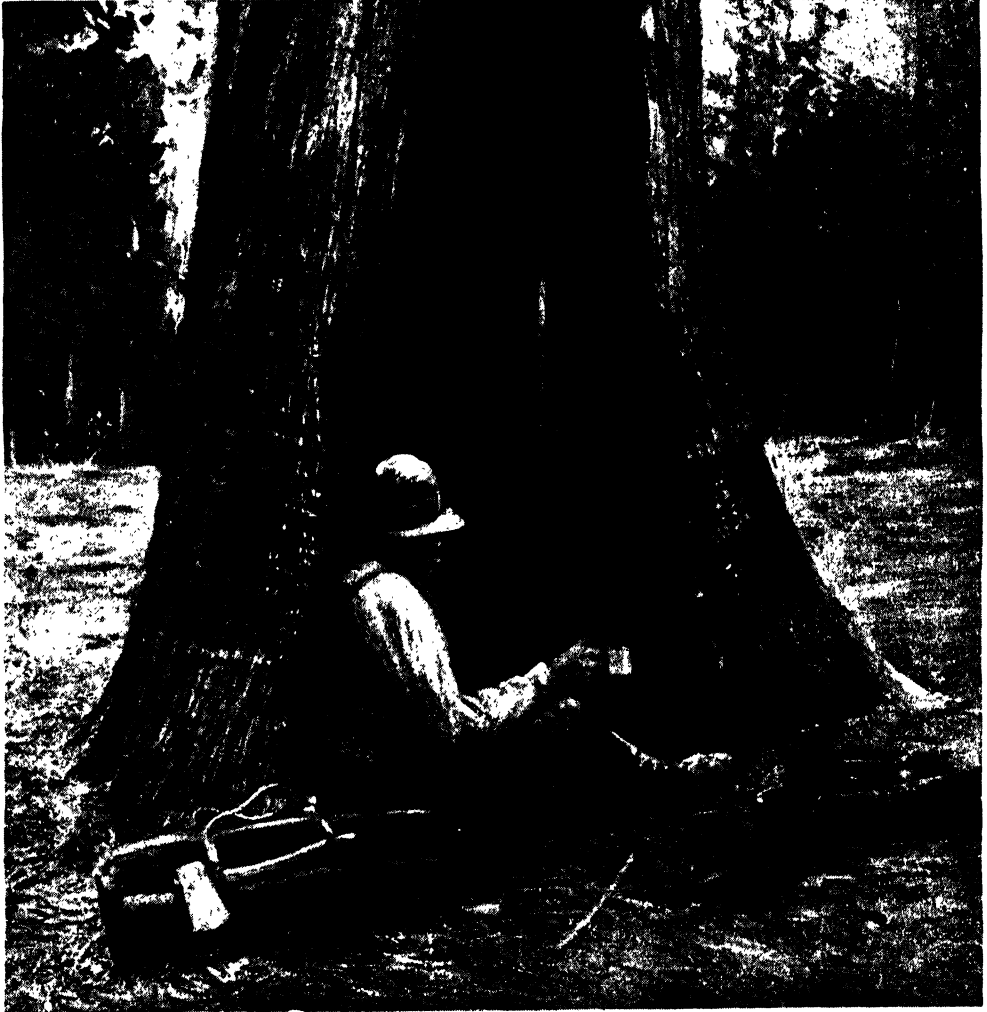
When at length, on the fifth day, water was found in some sandhills five feet below the surface, the greatest care was necessary in doling it out to the tortured horses, whose plight by this time was pitiable. Their loads were lightened, and Eyre, Baxter, and the elder of the three natives invariably walked, the two younger natives being occasionally permitted to ride alternately upon one of the strongest horses. Eyre now had his first sleep for three nights, the strain of the preceding days having put sleep out of the question. About this time they fell in with some natives, who, however, fled at the sight of the horses, which they had never seen before.

Hardly a fortnight elapsed ere disaster once again threatened them. This time they went for 160 miles without

THE DAUNTLESS MARCH ACROSS AUSTRALIA

finding surface water, and it seemed as though nothing could save them. By March 28 the Timor pony was left to die. "Whenever we halted," says Eyre, "the horses followed us about like dogs, appearing to look to us only for aid." Baxter now began to lose heart, though no thought of deserting

By the next day the last drop of water had been consumed. They lay down that night in a desperate frame of mind. But Providence had not altogether deserted them. A heavy fall of dew revived their spirits, and Eyre collected enough with a sponge in the space of an hour to fill a quart



A LONELY TRAVELLER

his leader ever entered his head. To save, if it were possible, the remaining horses, everything was abandoned but two guns, a water-keg, and a small quantity of flour, tea, and sugar. Despite this, Eyre was compelled to leave two more horses to their fate. Their exhaustion would have melted the heart of a stone.

pot. The natives collected about the same quantity with wisps of grass. They were now 160 miles from the last spot where they had found water, and had all but resigned themselves to the most awful of deaths, when, as *though by a miracle, they suddenly* came upon a patch of moist sand, and, digging frantically, discovered fresh

THE CHILDREN'S TREASURE HOUSE

water six feet from the surface. That night they killed one of the two remaining sheep.

April was now upon them, and the chill blasts that at night swept across the wastes of the Bight rendered their condition more desperate than ever. On the fifth, Baxter and one of the boys went back 47 miles for the stores abandoned a week before, taking with them three horses to carry the water. They were away four days. In the interval Eyre lived on a scanty ration of flour, eked out by roots roasted in hot ashes and pounded into powder. When Baxter and his companion returned they told a moving story, having had to abandon two more horses with their loads, which the wretched animals had been too weak to carry; one, indeed, had gone both blind and mad.

Their plight was now about as precarious as it could be. They were half-way between Fowler Bay and Albany, among barren sandhills, with no prospect of further water for 150 miles. Their scanty stock of food was all but exhausted, and, though they shrank in horror from the thought of eating their horses, their patient fellow-sufferers of the wilderness, it became evident that dire necessity would soon compel them to do so. Eyre knew it would be madness to retrace their steps across that fearful country, but Baxter, though determined never to forsake his leader, wanted to return to the east. In the end Eyre had his own way, and went back, accompanied by one of the natives, for the stores that Baxter had been unable to save—a ghastly journey of nearly 50 miles on foot. His load for the return trip—also on foot, for he would not exhaust the horses—weighed 32 pounds; the native was similarly laden.

They remained at this spot, gathering strength for the last stage of the journey, for twenty-eight days, living on stingrays—speared in the surf by the natives—horseflesh, and the last remaining sheep. The natives gorged themselves on the horseflesh, eating literally all night. Once they shot an eagle and ate that, too. It was now

the end of April, and Eyre decided to set out once more to the west. One would think that they had reached the very limit of misfortune, but the cruellest blow of all was yet to fall.

Baxter and the natives lay down to sleep; Eyre, not being sleepy, took the first watch. The night was cold and wild, and the wind blew hard from the south-west. Scud and nimbus were flying across the face of the moon. The horses were very restless, keeping Eyre moving up and down till he had lost sight of the camp-fires, which, burning low, gleamed now but fitfully. Suddenly a shot rang out. Rushing to the camp, Eyre was horrified to find poor Baxter lying on the ground in the last agonies of death. Let Eyre's own words describe the tragic scene:

The horror of my situation glared upon me in such startling reality as for an instant almost to paralyse the mind.

At the dead hour of night, in the wildest and most inhospitable wastes of Australia, with the fierce wind raging in unison with the scene of violence before me, I was left with a single native, whose fidelity I could not rely on, and who, for aught I knew, might be in league with the other two, who perhaps were even now lurking about with the view of taking away my life as they had done that of the overseer.

Three days had passed since we left the last water, and it was very doubtful when we might find any more. Six hundred miles of country had to be traversed before I could hope to obtain aid or assistance of any kind, while I knew not that a single drop of water or an ounce of flour had been left by the murderers.

With an aching heart I passed this dreadful night. Age can never efface its horrors, nor would the wealth of the world ever tempt me to go through similar ones again.

The camp had been plundered by the murderers—all that was left was forty pounds of flour, a little tea and sugar, and four gallons of water. Eyre now abandoned all but the bare necessities of life. Rifles and nearly all the ammunition had also been plundered. He was left with a single rifle, the barrel of which he was compelled to heat in the fire in order to melt a bullet which poor Baxter had inserted,

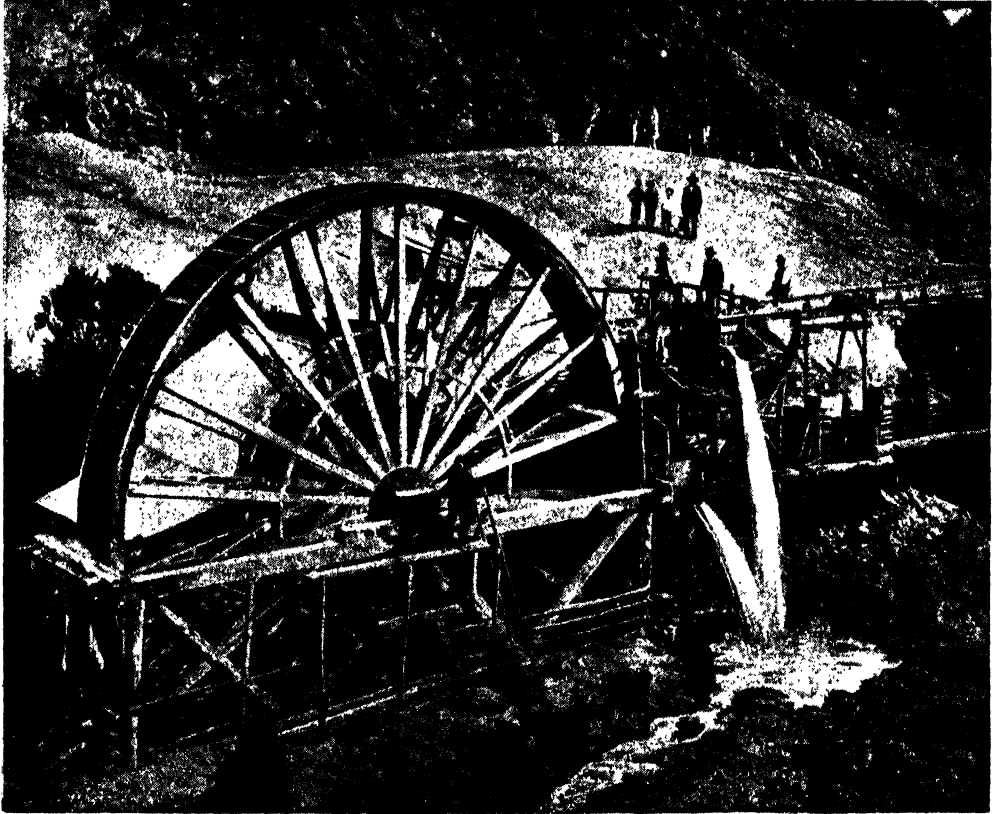
THE DAUNTLESS MARCH ACROSS AUSTRALIA

and which Eyre could not extricate, owing to the powder having become wet. In melting the ball Eyre nearly lost his life, the fire having dried the powder, and the ball passing within an inch of his head!

One task still remained—the burial of his murdered companion. The sheet rock, extending on every side, made it impossible to dig a grave, and the cliffs barred all access to the

as only a native can, making an oven and roasting about twenty pounds of meat, half of which he ate during the night. Eyre was desperately ill, but nothing could quench his spirit, and he struggled along, though almost in a state of coma. "I could have let the glass of life glide slowly away to its last sand," he says.

He now reached Point Malcolm—then, of course, uninhabited—where



A WATER-WHEEL IN THE PARCHED LANDS OF AUSTRALIA

shore. He could do no more than wrap a blanket round the body, and leave it enshrouded as it lay.

Another ghastly waterless stretch had now to be traversed, and after seven days and nights of anguish, with the two murderers hanging on their flanks like bloodhounds and rendering sleep an impossibility, they at length discovered water on the coast, at a distance of six feet from the surface. They shot another horse, on which the black boy Wylie gorged

he remained a week to recruit his horses, which had been reduced to the most pitiable extremities. The time was passed in shooting and fishing, and on one occasion, when searching for crabs, Eyre once again narrowly escaped death, being all but dragged out by the breakers and drowned in the undertow. It was then the end of May. The nights were bitterly cold and wet, and the travellers were tormented by flies and mosquitoes, and sometimes were without shelter

THE CHILDREN'S TREASURE HOUSE

or firewood. They had almost, indeed, come to the end of their scanty supply of food, when Providence once more miraculously intervened to save them. A ship lay in sight, anchored in a sheltered bay! Eyre at once lit a fire on a rock, hoping to attract attention, and a boat's crew soon headed towards him.

Long years afterwards Henry Kingsley described that drama of the wilderness. The ship was a French whaler, the Mississippi, and the crew could hardly believe their eyes as they saw Eyre's gaunt figure staggering towards them. "It was a white man indeed, but such a man as they had never seen before. He was worn and thin; his clothes were ragged; he seemed wild, and looked like one who had risen from the dead, a man who had evidently such a story to tell that you trembled while you waited for him to begin."

Rossitter, the English captain, put his ship at the disposal of his guests, and there they stayed for ten days, regaining their strength for the last

stage of that journey. One would have thought that Eyre had by now satisfied his own stern test and made amends for what he called his past failures, but to all Rossitter's entreaties he turned a deaf ear. There was no limit to the endurance of his dauntless soul.

In less than a month after bidding farewell to the Mississippi he arrived at Albany. The last few hundred miles, though unattended by further peril, were passed in great discomfort, as the weather was rainy and bleak, with pitiless storms, and they were compelled to wade through cold torrents in the depths of the winter season. The journey of 1060 miles was, however, at an end. A year and twenty-six days before they had left Adelaide, during which they had explored a vast area of country, including the whole south line of the coast of the continent.

"It is perfectly certain," says Kingsley, "that his journey was in one way the greatest ever carried through, but, as for the immortality of it, I cannot find anyone in London who ever heard of it or him."

What John Forrest Lived to See

NEARLY thirty years were to pass before Eyre's path was retraced. His journey from east to west took more than a year. Surveyor John Forrest, a young West Australian of twenty-three, was now to cross from west to east, and make the journey in less than half Eyre's time; but, great as were the difficulties encountered and terrible their privations, they were not as formidable as those of his predecessor. But Eyre's mantle fell none the less worthily on his shoulders.

Had it not been for Forrest the romance of the great railway that now links Perth to her eastern sisters would probably still have to be written. He it was who dreamed his great dream of a continent knit together by a living band of steel, and inspired his countrymen until he saw that dream a reality, a visible pledge of nationhood. Today the Transcontinental trains cross from Perth to Port Augusta in sixty hours. In 1870 it took Forrest five

weary, perilous months! When the first east-west train crossed the continent, just 47 years later, John Forrest—surveyor no longer, but one of the leaders of the Commonwealth, honoured by his King, and a member of the Ministry—was a passenger in it.

How his thoughts must have flown back to the old trail, where Baxter's bones lay bleaching in the winds! And from what a full heart must he have spoken of "the transformation in the mode of travelling and all that attends it," which made him "feel grateful that one has been privileged to take part in bringing it about!" Eyre and Giles had long since made the last crossing of all—towards the sunset. At the beginning of the year 1919 the great West Australian made his last crossing. He, too, in very truth, has "gone West."

Forrest was no stranger to exploration when he undertook the leadership of the first journey from west to east.

EYRE STAGGERED ON LIKE ONE FROM THE DEAD



W7
LIGHTING A FIRE ON A ROCK, EYRE ATTRACTED A BOAT AND STAGGERED TOWARDS IT. NEVER HAD THEY SEEN SUCH A FIGURE AS HE, LIKE A MAN FROM THE DEAD

THE CHILDREN'S TREASURE HOUSE

In the preceding year, 1869, he had undertaken a three months' expedition, with 16 horses, 3 white men, and 2 natives, to search for traces of Leichardt. In this he, like all others engaged in a similar quest for that vanished explorer, was unsuccessful, and he returned to Perth after a journey of 2000 miles, in which this stripling of twenty-two had many exciting adventures, one an encounter with hostile blacks, in which the party narrowly escaped with their lives. It was no novice, then, who, in the following year, led the expedition from Perth to Adelaide, round the Great Bight.

With him were his brother, Alexander Forrest, two other white men, and two quaintly-named aborigines, Tommy Winditch and Billy Noon-gale, and fifteen horses. Striking southward from Perth, they reached Eyre's trail about the middle of April, having up to this stage suffered little beyond an occasional drenching from nocturnal rainstorms. They reached Esperance Bay, which is 450 miles from Perth, about the end of the month, and here the Adur, a small 30-ton boat, placed at their disposal by the Government, met them with a fresh supply of stores. By May 18 they had reached Israelite Bay, 120 miles farther on, where they camped till the end of the month, taking from the Adur, which now left for Eucla, 350 miles distant, a second supply of stores.

Up to this point they had undergone little privation, though their horses were in a very reduced state, owing to the scarcity of grass. The rest, however, had worked wonders, and on May 30 the little band set out on its long trek for Eucla, the nature of the country before them being quite unknown, except so far as it was indicated by the not very encouraging record of Eyre's journey.

They were now to undergo the experience that, 29 years before, had all but involved Eyre in disaster. Four days passed before they found any surface water, and this, such as it was, filled a few rock-holes. The horses had had but two gallons each in

that 96 hours, and were terribly distressed, and the explorers were all very tired from weary and continuous walking. The only water shown on Eyre's track was 150 miles distant, at Point Dover, where poor Baxter had met his fate, and their supply did not exceed 30 gallons.

Forrest began to feel very anxious. At least a week's journey over fearful country—of which Eyre had given such tragic accounts in his journal—lay ahead, but, like Eyre on a similar occasion, Forrest had no thought but "onward."

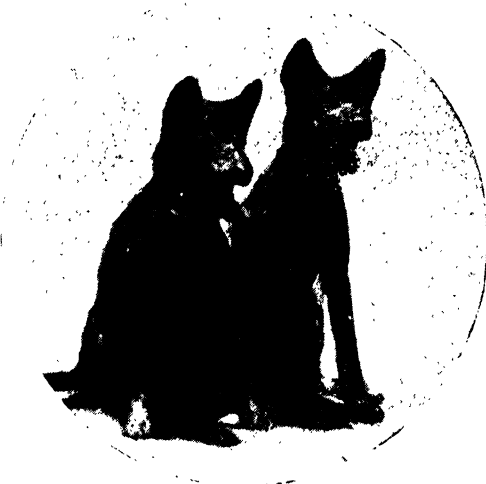
At last, on June 13, they reached Point Dover, where their lives, like those of Eyre

and his companions, were saved by the precious fluid. They stayed here long enough to recruit their horses, finding many traces of Eyre—a pine-pole standing in one of the hummocks near the beach; the shoulder-blade of a horse and portions of harness, relics of the animal Eyre had killed there for food long years before.

They now pushed on, making for Eucla, falling in with some natives on the way, who slept at their fire,

had not the least particle of clothing, made pillows of each other's bodies, and resembled pigs more than human beings. By July 1 they had reached Eucla, having travelled over 300 miles and finding only one place, Point Dover, the tragic scene of Baxter's murder, where they had been able to procure permanent water. The simple entry in Forrest's journal is strangely moving: "I trust we all recognised, with sincerity and thankfulness, the guiding and protecting Father who had brought us through in safety."

Next day the Adur was in sight. They stayed at Eucla, taking in stores and resting their tired horses and their no less tired selves for nearly a fortnight. The country they had passed over since leaving Point Dover far surpassed, as a grazing country, anything they had ever seen, though the absence of permanent water was, of course, its greatest drawback. They had met with very little game along the route—a few kangaroos, but (an almost certain sign of



THE WILD DINGO DOGS OF SOUTH AUSTRALIA

A TRAVELLER'S TREASURE IN A THIRSTY LAND



A GLORIOUS SURPRISE FOR A DESERT EXPLORER



THE EMU'S EGGS WHICH GIVE BOTH FOOD AND DRINK TO THE LONELY TRAVELLER IN THE PARCHED REGIONS OF AUSTRALIA

THE CHILDREN'S TREASURE HOUSE

the scarcity of water) no emus; and, though it was now the depth of winter, no rain had fallen in this district since the middle of April.

They had covered rather more than half their journey. The Adur was now, on July 7, sent back to Fremantle with a progress report, and they were then finally cut off from civilisation, and thrown entirely on their own resources. It is a remarkable coincidence, when one thinks of it, and not a little thrilling, that, almost thirty years before, Eyre had been in just such another plight, when he sent his ship back to civilisation and plunged as resolutely into the unknown!

By July 14 everything was ready for the journey, and they said farewell to Eucla, passing the boundaries of West and South Australia, with a precious burden of but 30 gallons of water for all those hundreds of miles that still lay before them. Their troubles at once began, and for nearly four days they travelled 135 miles without seeing a drop of water. For 90 hours the unfortunate horses went without a drink, except what little could be spared from the water-drums. At last the head of the Bight was reached, and here, digging in

the sand, they found fresh water at a depth of two feet. "I have never," says Forrest, "seen horses in such a state before, and hope never to do so again."

For sixty hours Forrest himself had had but five hours' sleep!

The worst, however, was over, and, as they were now in settled districts, they gave up keeping watch. Fowler Bay—the starting-point of Eyre's great western trek—was reached ten days later, and the intervening 600 miles to Adelaide, via Port Augusta, took them just a month. Little more than a year later Forrest had the satisfaction of seeing Western Australia joined up by electric telegraph, which followed his trail, to the overland telegraph line to Port Darwin; and he lived to ride on the first train that crossed Australia on the new line from east to west. The isolation of west from east and from the rest of the world no longer existed.

In 1874 he made his last journey of exploration from Geraldton, north of Perth, to the overland telegraph line. At Weld Springs his little band had an exciting adventure with natives, being attacked by over fifty of them, and having to resort to firearms to disperse them.

Other Riders on the Long, Long Trail

WE shall now leave the coastal trails of Eyre and Forrest—which, with the sea, form the southern boundary of the railway—and follow Giles's trail, its northern frontier.

Eyre and Forrest had made their journey on foot, driving their pack-horses before them. But Giles rode almost every mile of his long trip of nearly 2600 miles from Beltana to Perth, and the hardships that he suffered were mild indeed in comparison with those of his predecessors. Let it not be thought, however, that he was free from peril. On his preliminary journey from Fowler Bay to Beltana—a distance of 700 miles, which it took him nearly two months to cover with riding-horses, pack-horses, two camels, and a native guide—he struck a waterless patch of 220 miles, in the course of which all his horses either died of thirst or had to be put out of their misery by a merciful bullet. The lives of the party then depended

entirely on the two camels, and, after a terrible journey of eight days from Wynbring—through which the east-west line now runs—they, like Eyre and Forrest before them, suddenly stumbled on an unexpected and heaven-sent supply of water. What mattered it that it lay in a clay-pan and was yellow and thick, for it literally dragged them back from the brink of Eternity.

It was on this journey that the extraordinary staying powers of the camel were first realised. On one occasion those ships of the desert went without water for eight days, while the horses perished alongside, with eyes so sunk into their heads that they were all but hidden. We cannot wonder that when, shortly afterwards, Giles set out on his long trek to Perth he took with him only camels to carry his stores. Youldeh, which Giles made one of his depots for his western journey, is now, like

THE DAUNTLESS MARCH ACROSS AUSTRALIA

Wynbring, traversed by the railway, though marked Ooldea on the map.

There were many dramatic incidents in Giles's six months' journey of nearly 2600 miles, including a waterless trek of 325 miles. On one occasion a murderous attack was made upon them by natives. A resolute volley, however, when the blacks had all but reached the camp, checked them, and they finally fled, leaving many murderous-looking weapons behind. Shortly afterwards Giles reached Perth, and the six months' journey was at an end.

Two more of the old explorers' trails remain to be followed. David Lindsay's expedition in 1891 was, like Giles's, fitted out by Sir Thomas Elder. The greater part of it lay far to the north, but it crossed Giles's track at Queen Victoria Springs, and then struck southwards to the coast, crossing part of the country through which the railway now runs. His journey, however, was largely uneventful.

In 1896 Mason was sent by the West Australian Government to explore the country to the north of Eyre and Eucla, and across the Nullarbor, mainly for the purpose of ascertaining whether the rabbits were moving westward over the plains.

Crossing overland from Kalgoorlie with camels, all had gone well with Mason and his companion until they reached a spot a few miles from Boundary Dam, the starting-point of Giles's waterless trek of 325 miles more than some twenty years before. Here, however, a treacherous tribe of blacks plundered their camp while they slept and stole their camels. How near they had been to death we can imagine. They were nearer to it six days later, after a terrible walk of 160 miles, the last hours of which they endured delirious with thirst.

They were each laden with 70 pounds of equipment and stores; by day the tropical sun beat pitilessly down; at night it was bitterly cold, with black frosts that left them almost frozen stiff; they had no firewood—they were crossing the Nullar-

bor—and at the end of the fifth day their scant supply of water, carried in bags, had been either consumed or had evaporated. The broken limestone bruised their feet, and at night they had to pick their steps with the utmost care to avoid falling down the blowholes—spiral funnels, eighteen inches to two feet in diameter, and often of an incredible depth—quite hidden by the grass. Eerie sounds fell on their ears as they approached them; in some the sound was like rushing water, in others like a train at full speed or an approaching hurricane.

Dingoes and crows began to follow them, hovering ominously. They killed their dog, and ate him; they even ate a weed called pigface, and licked the dew off grass and herbage, and their mouths were bleeding from the sharp edges. Late on the afternoon of the sixth day, when Mason had abandoned all hope and his companion was raving mad, they suddenly found a small rock-hole, with four gallons of water. They were saved! Once again, in the words of the old prophet, the "wilderness" had been made "a pool of water."

When they had recovered their strength a little, they struggled on to Eucla—and civilisation, Mason's companion still wrapped in the dark mists of insanity. It was months before he recovered his reason. Later, they finished their journey, visiting Eyre, and Point Dover, of sad memory.

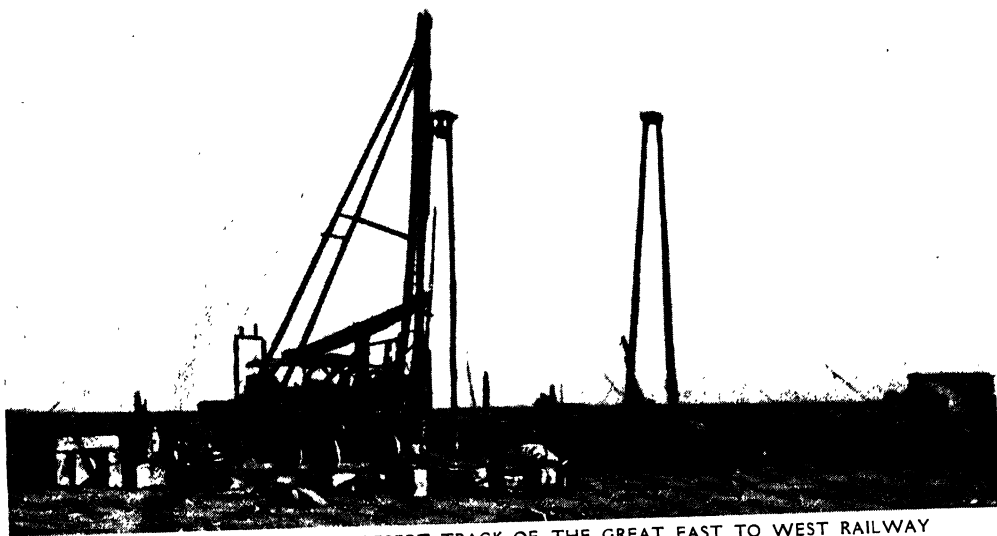
Mason's account of the country through which they passed tallies with Forrest's, and is a glowing one. The downs are entirely destitute of timber, covered with magnificent grasses, barley, and wild oats, and spangled with a million flowers. The soil is a rich chocolate loam.

One trail, the last, still remains to be recorded, and then we have done with Romance and go on to Reality. In 1901 the country between Kalgoorlie and Eucla was surveyed by John Muir, in search of the best route for the railway. Sixteen years later the railway, rendered possible by the old explorers, was an accomplished fact.

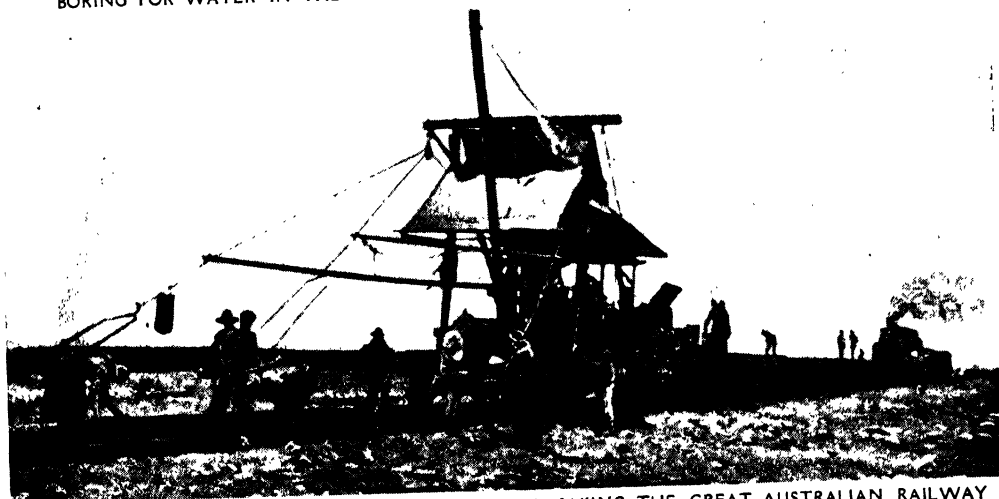
MAKING WAY FOR THE GREAT STEEL LINE



THE STEAM PLOUGH AT WORK ON THE ROUGH UNBEATEN ROAD ACROSS AUSTRALIA



BORING FOR WATER IN THE DESERT TRACK OF THE GREAT EAST TO WEST RAILWAY



THE EXTENDING MECHANICAL TRACKLAYER USED IN MAKING THE GREAT AUSTRALIAN RAILWAY

THE STEEL BAND OF CIVILISATION

How They Laid It Across Australia

THE story of the blazing of the trail across Australia is told in the previous pages; it is one of the unforgettable chapters of human courage and endurance.

BUT is anything in it all more remarkable than that one of these explorers, one of the first men to track the pathless way from east to west of this great island continent, lived to follow his trail by train?

WHERE the old explorers fought their way through waterless land the railway train now runs, and in the first train steaming over these thousand miles of line rode old John Forrest, looking out from the window of the railway on the sights he had seen in his tramp on foot so long ago.

WHEN the line was begun the country, for four-fifths of the way, had not a single inhabitant except a few wandering natives, and

THE DREAMER SEES HIS DREAM COME TRUE

THE dream of land communication between the eastern and western States of Australia goes back far, but it was not for more than half a century after Eyre had crossed the continent that the railway began to emerge from the mists of imagination and take shape. Even until October in 1917 the coastal telegraph line across the Bight was the only overland connection between east and west.

As Cecil Rhodes, with splendid vision, foresaw the Cape to Cairo line, so Forrest dreamt his dream of the Transcontinental lines. He lived to see its realisation and to travel on the first train to cross the lonely spaces of the Nullarbor. He told the West the

there were no hills, no valleys, no rivers, no trees, and no water for five hundred miles; yet this tremendous line was laid for a thousand miles or more, while the whole world was at war, by an army of strong and willing and teetotal workmen, whose achievement must be counted as one of the greatest engineering enterprises on the continent.

IT gives the first communication by land between the two halves of Australia; it runs in a straight line, as straight as any Euclid ever drew, for over three hundred miles; it runs for over a thousand miles without a single tunnel and with hardly a cut; and it opens up a quarter of a million square miles of unoccupied land for the future prosperity of the Commonwealth.

THIS is the story of how they laid this line—one of the greatest railways anywhere in the world.

line would come with the coming of the Commonwealth, and the West believed him and entered the gates of Nationhood. Nor was its faith belied.

Time was now needed for the infant Commonwealth to find its feet—and its millions of money!—and, beyond a preliminary survey, nothing more was done till Lord Kitchener, in 1910, reported on the defence of the Commonwealth. He saw the enormous importance of land communication between east and west, and his report galvanised the project into life. Forrest had found a great ally, and in September, 1912, the Governor-General turned the first sod at Port Augusta. Five months later Mr. Andrew Fisher turned the

THE CHILDREN'S TREASURE HOUSE

first sod from the western end at Kalgoorlie. Two ribbons of steel began to wind out like a silver river into the wilderness, to meet five years later at the eastern end of the Nullarbor Plain, linking a continent and bringing a third of Australia less than two days nearer to the other two-thirds.

As the railheads crept over the lonely plains, two armies of industry, both a thousand strong, moved towards each other across Australia. Every three weeks there was something like an exodus—the camps and workshops of the workmen, the camp trains of engineers and surveyors, the hospital cars of the medical section, recreation rooms, kinemas, cooks, camels, boarding-houses, post and telegraph offices and savings banks, moving on to the new front. And in the Nullarbor they said a man might go to sleep in the morning, wake on the site of the new encampment, and never know from his surroundings that his camp had shifted twenty miles farther on! The workers led nomadic lives, moving ever onward as the line slowly lengthened.

It was an industrial journey into the unknown. Is it not extraordinary that, during the greatest war in the world's history, Australia should have been able to complete this Transcontinental Railway, while in other parts of the Empire the lines were pulled up to feed the European battle-fronts? Proof of a high belief in the power of Britain's arm and in Australia's own proud destiny!

The trial survey was undertaken in 1907-08 at a cost of £20,000. About 200 camels were used along the route on which the present line now runs. As the country is as flat as a pancake, there are no tunnels and only six bridges. Some of the other great transcontinental systems of the world, are larger and have involved immensely greater engineering difficulties, such as, for instance, the piercing of the Rockies, the crossing of the Andes, and the penetration of the primeval forests of Central Africa; but nowhere has a railway

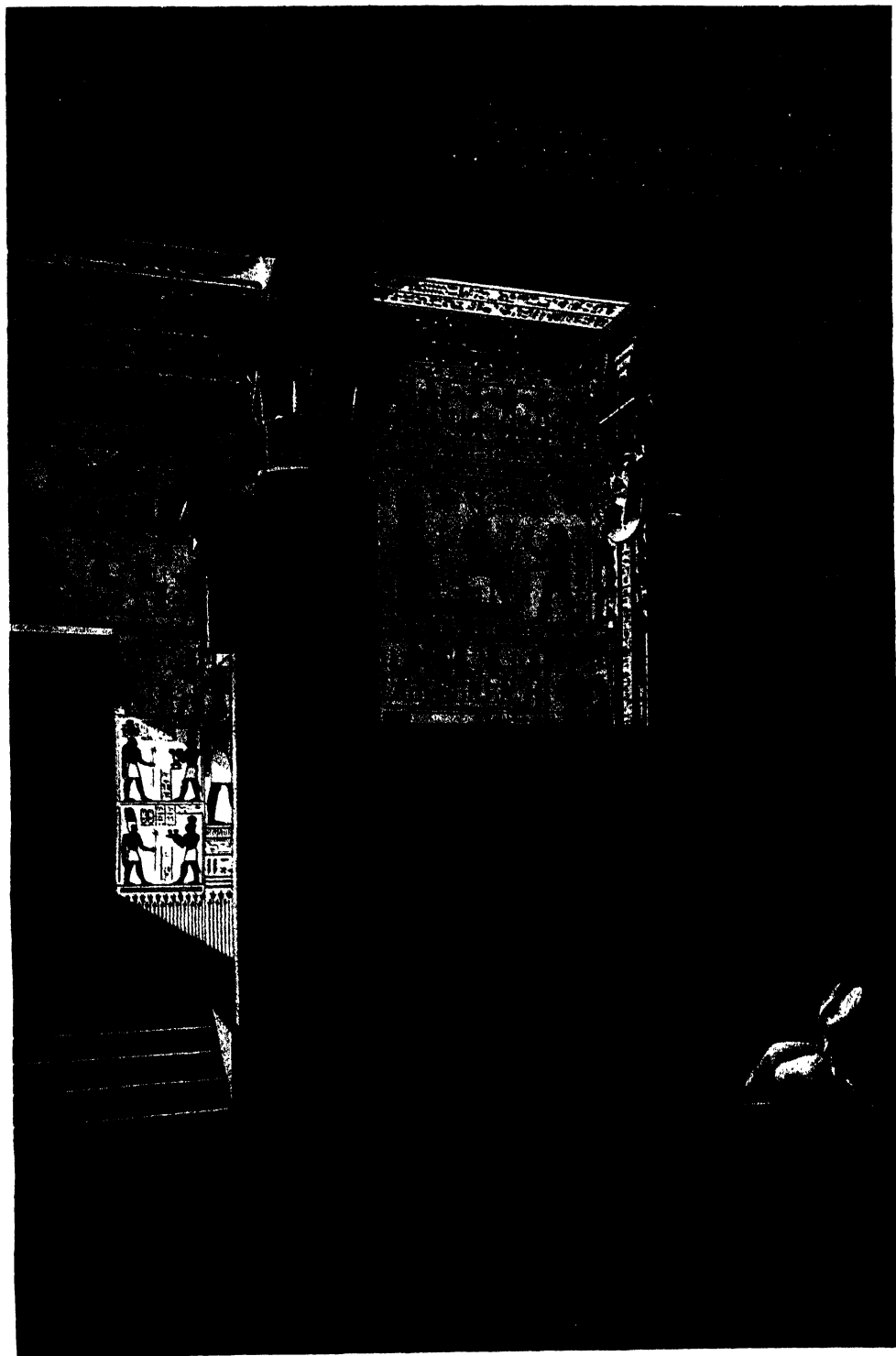
been built across a thousand miles of country practically devoid of surface water, and for nearly 800 miles absolutely uninhabited. On the Nullarbor, a treeless plain of 450 miles—as big as France—the railway runs in a straight line for more than 330 miles, the longest straight in the world.

You look back, you look forward, and as far as the eye can see that ribbon of steel runs on, melting away into the infinite. By day the sun burns in a vault of cloudless blue; at night a million stars canopy the plains, and the moon silvers the sleeping continent, bluebush and salt-bush looking even more ghostly than by day. No sound is heard but the curlew's eerie cry, or the shrill piping of the plover as he calls to his mate.

The colossal quantities of material and labour involved in this vast undertaking are almost incredible. Nearly 150,000 tons of steel rails were used to lay the track, each rail weighing 80 pounds. About half the rails came from America and England; the balance were manufactured at the great Lithgow steel mills in the heart of the Blue Mountains. The solitudes, once flooded with the song of the bell-bird, were invaded by a great industrial army and resounded to the clang of iron. Rivers of molten metal flowed from the blast furnaces to be moulded into shape and transported thousands of miles to the railheads. On the heels of the surveyor came the petrol tractors, with disc ploughs to rip up the virgin soil of the overland, and horse and camel teams followed with scoops, hollowing out the road-bed.

Between two and three million sleepers were cut and laid down to receive the rails. One of the striking features of the track is the enormous size of the sleepers. Australia has "timber to burn," and the larger the sleepers the better the permanent way. Many motor rock-crushers were used at the ballasting pits, and the haulage figures for the construction trains stagger the imagination. In one year the engine mileage was nearly 800,000 miles, the vehicle mileage

A GLORY OF FORTY CENTURIES AGO



WHAT THE TEMPLES OF ANCIENT EGYPT WERE LIKE

THE STEEL BAND OF CIVILISATION

nearly nine millions ! Labour had to be brought hundreds or thousands of miles, and all material had to be imported either from Europe or from the eastern States.

One of the most remarkable of the many labour-saving devices was the American tracklayer. The machine is mounted on a truck at the head of a train. Behind come several trucks piled with steel rails, fish-plates and dog-spikes. Next comes the locomotive, followed by a long train of trucks laden with sleepers. On the right-hand side of the train runs a continuous "trough," or mechanical conveyor, with its floor consisting of rollers. It reaches from the rearmost car of the train to 40 or 50 feet ahead of the tracklayer.

When a length of track is to be laid the locomotive pushes the forepart of the train slowly forward until the end of the rail last laid is approached. The rollers in the trough are then set in motion, and sleepers are fed into them and carried forward to the front of the train, and deposited on the ground.

As each sleeper leaves the trough it is picked up and laid in position. When thirty or forty sleepers have been so dealt with, a pair of steel rails are picked up by the derricks, with monstrous lobster-like arms, and guided into the correct position. The gauge then fixes the width, and within a very short time men are spiking the rails to the sleepers, slipping the bolts into the fish-plate connecting the new rail to its fellow already in position, and the tracklayer is moving forward again five or six yards over a new piece of track.

When this mechanical wonder has passed the line presents a bedraggled appearance ; it is true to gauge, but strangely twisted. Men, however, soon pack it in and straighten it, and in this skeleton form it is passable, so long as trains proceed slowly and carefully. This way of laying a line enables supplies to follow more quickly than any other known method.

When one remembers the trials of the explorers in the waterless country to the north and south of the line, it is not surprising to know that by far the greatest obstacle its builders had to overcome was the lack of surface water.

The average rainfall on the country traversed is rarely more than seven inches a year. At times, indeed, the records show that years have passed without a single inch of rain having fallen. Thousands of men had to be supplied with water, and more thousands of horses, camels, and sheep, to say nothing of the countless other purposes for which water was required. A more hopeless place to seek a water catchment than the dry lands of Spencer Gulf never existed, and the surveyors and land-borers of the overland line deserve well of their country.

With their camel teams and petrol engines they drove holes in the heart of the continent, prospecting for hundreds of miles into the Nullarbor Plain, with nothing but the mirage and the willy-willy—a fast-travelling spiral dust-whirl—for company, working by day in the burning heat and chilled by the night winds sweeping up from Antarctica across the wastes of the Bight. In the western division, which is off the artesian belt, the boring parties drilled holes as deep as 1500 feet, and struck water, often warm, with a flow varying from 7000 to 70,000 gallons. In addition to the bores, five great catchment reservoirs were constructed, with a total capacity of 30 million gallons, at intervals of 250 miles west from Port Augusta. These rejoice in the melodious names of Bookaloo, Encolo, Windabout, Wirrappa, and Wynbring. The great pipe line from Mundaring Weir to Kalgoorlie was also drawn on, and the water was carried by rail for the maintenance of the construction camps.

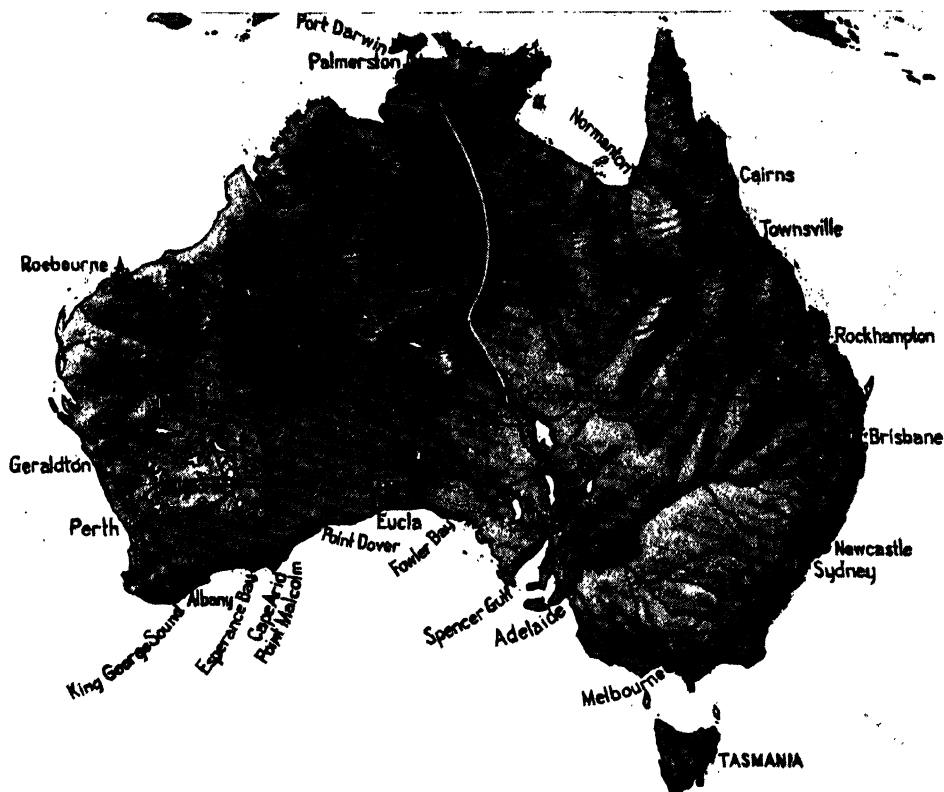
Most of the country through which the line passes is beautifully grassed and—except, of course, on the Nullarbor Plain—bounteously timbered. In parts the symmetrical kurrajong

THE CHILDREN'S TREASURE HOUSE

and the aromatic sandalwood—the true sandalwood, so dear to Chinese hearts—are fairly abundant. At intervals the train runs through miles of everlasting daisies, and in the spring many beautiful native flowering shrubs are in full bloom.

There has always been much animal and bird life along the line, and now that water is conserved in such quantities a great increase of game is inevitable. Ducks, teal, and bronze-

scrub, and deposits its eggs in tiers in the centre, each egg being placed on its smaller end and standing upright! The mound is then covered over with sand and leaves, and the young are hatched by the heat of the sun, scratching their way to the outside world as soon as they emerge from the shell. The egg itself is a lovely thing, in colour a dark reddish pink, and is greatly prized by the natives for food. Millions of rabbits



THE WAY THE OLD EXPLORERS WENT AND THE WAY THE RAILWAY GOES—THE ROUTES OF EYRE AND FORREST WERE LARGELY BY THE COAST

wing pigeons flock to the water in thousands. There are many plovers—shyest of birds and almost inaccessible to the sportsman—and quail and wild turkeys are found in abundance. But, of all the birds that haunt this region, perhaps the most fascinating is the lepoia, or native pheasant, with its plumage of dark brown barred with black. It builds a mound, measuring several yards in circumference, in the midst of the

are found on the plains, and kangaroos and wallabies abound in scattered localities, as well as iguanas, which, despite their snake-like appearance, are eaten, not only by the natives, but also by the settlers. Black and white cockatoos and myriads of blue and green parrots are also met with, and the waters of the bay teem with fish. What a country for a holiday!

The rolling-stock of this great line is the result of long experiment by the

THE STEEL BAND OF CIVILISATION

best railway brains in the Commonwealth. Australian engineers scoured the world for the latest ideas of travelling luxury. Huge day and night coaches, of a size undreamed of in England, were built, and fitted with ice-chests, fans, kitchens, and shower-baths. When we think of the conditions under which the explorers made their trip on foot across the shores of the bay here is a contrast indeed.

Of the results of this vast undertaking, which has cost more than seven millions of money, every penny provided by the Australian taxpayer, it is too early to speak. The line has not been in existence very many years, but that it will be of immense benefit to Australia no one who knows that southern land can for a moment doubt. When Kipling wrote

For East is East and West is West
And never the twain shall meet

he was not thinking of Australia. Half a million far-off Australians are now in touch with their eastern brothers. Every capital in the spacious distances of the continent has now been brought into vital contact with the others by the grip of the steel rail that travels from the sunrise to the sunset of Australian geography. The sea-weary loneliness of the west has been dispelled by the glistening wand of the railway magician, who has cut 60 hours off the mail time between Europe and Eastern Australia. Formerly the mail went by rail from Sydney to Adelaide, and then by steamer across the Bight to Fremantle, taking six days to get there. A new telegraph line, too, was erected hand in hand with the construction of the railway, and the ease with which this can be repaired makes it very much more valuable to the Commonwealth than any of its predecessors.

Now the sea journey is dispensed with. The stretch of sea between Adelaide and Fremantle, exposed to the full fury of Antarctic gales, has a reputation more evil than that of the Bay of Biscay, though the writer, who has crossed it six times, has never seen it rougher than a millpond.

This high steelway, linking up the British people as the Roman road linked up the Roman Empire 2000 years ago, renders possible one of the longest railway runs in the world—from Brisbane, by way of Sydney, Melbourne, and Adelaide, to Perth on the surf-beaten shores of the Indian Ocean, 3485 miles in a running time of less than 150 hours. But for the "break of gauge," a relic of the days when each State acted independently, the journey would be quicker still.

Australia now depends no longer on the sea for her defence. No longer is the continent cut in two, east severed from west, with only sea routes between.

And what of the resources awakened amid the saltbush and the myall, the black oak, the mulga, and the kurrajong? It has already been estimated that the country for fifty miles on each side of the line, and for a length of 900 miles, will support three million sheep—three million sheep will produce at least 21 million pounds of wool a year, which, with the golden fleece at a shilling a pound, means more than £1,000,000. Wheat, too, will be grown there—dry farming has made wheat-growing possible on land with less than ten inches of rain a year.

If we remember that Australia is today the greatest food-producing country—per head of population—in the world, what a prospect of wealth is opened up by this new highway through the continent! New mineral fields, too, will be developed. Gold has for long been known to exist at Tarcoola, but the pioneers, as one of them quaintly remarked when the line was opened, "were too busy finding water to look for it!"

And now Australia is thinking of the next great railway. The great north to south line from Oodnadatta to Darwin is yet in its infancy. It will run through country even richer than that tapped by the east to west line, blessed with a bountiful supply of surface water, and opening up almost undreamed-of possibilities. But that is another story.

THE LONG PROCESSION DOWN THE HILLS



THE SHEPHERD LEADS HIS FLOCKS THROUGH THE SPACIOUS WAYS OF NEW ZEALAND

THE ISLAND OF SPLENDOUR

400,000 *horses* ; 2,000,000 *cattle* ;
24,000,000 *sheep* ; 350,000 *pigs*.

THAT is a nice little farmyard for just over a million people to own. It is the farmyard of New Zealand.

It represents a sort of Noah's Ark on a titanic scale, for as Noah took the animals into the Ark, so the New Zealanders have taken their animals into their ark. An ark it is, an ark of refuge from the storm and stress of crowded life in over-populated cities in the Motherland, perhaps the fairest ark in all the world. With one or two humble but interesting exceptions, every living thing, like man himself, had to be carried to New Zealand. The whole romance of colonisation and civilisation is written round this farmyard of New Zealand.

It is the story of Robinson Crusoe grown into a nation, but it is more wonderful than Crusoe's exploit, for Crusoe did find goats and grapes on his island, and our New Zealanders did not. They had to take their goats and grapes, their plants and fruit-trees, their corn and grasses. They even had to take their own fishes and insects. The prosperity of the nation depended ultimately upon bees. New Zealand, which now boasts over twenty sheep for every man and woman and child in the land, was a sort of invitation to a perpetual party to which you had to take not only your own mugs, but your own food and drink. There was the country, a land of splendour and natural marvels, a land fit to be a fairy's dwelling, a land of snowy mountains and of mountains on fire, of swift rivers and glorious waterfalls, of lakes boiling up from the depths of the earth, bringing healing in their strangely charged waters. Yet this land of mighty forests and noble plains,

Made green with the running of rivers,
And gracious with the temperate air,

was without any animal life except

birds, bats, a few reptiles, and a rare kind of frog. New Zealand has an area of well over a hundred thousand square miles ; it is more than 12,000 square miles greater than England, Scotland, and Wales, and has a far finer climate, yet, though its natural conditions seem exceptionally favourable to a rich and varied animal life, it never possessed a fauna such as ours. We have had lions, tigers, bears, wolves, hyenas, elephants, mammoths, reindeer, lemmings, foxes, wild cattle, horses, wild swine, hares, rabbits, hedgehogs, various types of shrews, mice and rats, in addition to crocodiles, alligators, and the frightful monsters of the great age of reptiles ; but New Zealand had none of these, not so much as a tortoise or a snake.

What does it all mean ? It means that the two great islands of New Zealand were once connected with other islands which linked her with Asia ; that the forms of animal life which had then developed marched south-east into the land, and before the higher types could arrive the way in was snapped. Islands were formed. New Zealand was shut off, twelve hundred miles from Australia, five thousand miles from South America. She had set up house for herself, and a pretty kettle of fish she had for a dowry. Not a single mammal, nothing warm-blooded clad in hair, but birds and a meagre collection of reptiles and her frogs.

Which got there first, the frog or the reptile, we do not know. Frogs are water-born land animals, and therefore they came before reptiles in the scheme of Nature ; fishes and fish-like animals gave rise to higher types, hatched in the water, but going on land to live and returning to the waters to lay their eggs. Next came true reptiles, which could live all their lives on land, and lay their eggs there. Later came birds, which were converted reptiles, changing scales into

THE CHILDREN'S TREASURE HOUSE

feathers, and front legs into wings. So New Zealand, while still a limb of a continent, got the three types of land life then available, but nothing else. Ages afterwards she got bats, which could fly to her, but no other mammals. She never did get any naturally. Man had to take them to her.

Now, it is evident from this that New Zealand's little family was very ancient and primitive. Can she show us anything today of her ancient stock? She can. She can show us the oldest living backboned land animal in the world. It is a little lizard-like reptile, called the sphenodon.

It is true to say that it is as old as the hills; indeed, it is older. It is older than the chalk or limestone hills. It is far, far back to the age in which the white walls of Old England were built, but the sphenodon reached New Zealand in what we

The sphenodon did not change. He is still as he used to be, a four-legged lizard, with a mouth like that of the first birds, a sort of beak with teeth. But in his antique frame he preserves for us the key to a grand secret. He has the remnants of what we now call the pineal eye. There exists in the brain of all mammals, man included, a curious organism known as the pineal gland. A very great puzzle was this gland. Descartes, one of the greatest of philosophers, who was born in the sixteenth century, investigated it, and decided that it was the seat of the soul. Nobody could prove that it was not, so everybody believed him. But when white men reached New Zealand, and found the age-old sphenodon, lo, there was the pineal gland, not deeply centred in the brain, but visible on the surface of the skull! And what do

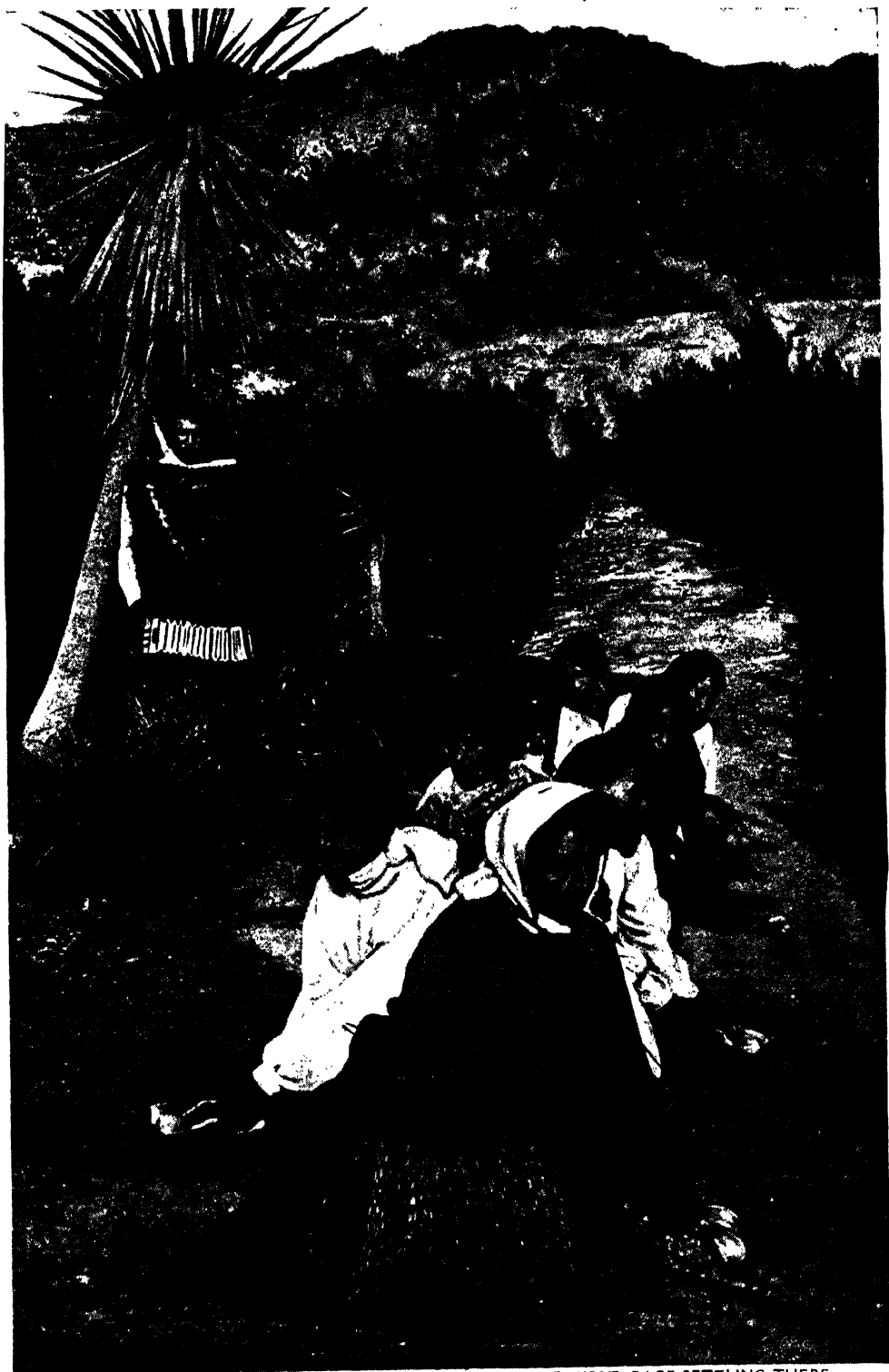


THE CATTLE OF NEW ZEALAND, OF WHICH THE DOMINION HAS OVER TWO MILLION HEAD

call Triassic days, which occurred as long before the chalk days as the chalk days were before our own. The sphenodon is still living, unchanged in form. He has learned nothing, he has not improved. He is the same old type of reptile today that his ancestors were millions of years ago. When sphenodons first became an established form of life, they spread near and far over the earth's surface; they were not confined to New Zealand. All but the New Zealand family have disappeared; the remainder changed by slow process of time into other life-forms, radiating and forking and slowly altering, in competition with other life-forms, until we lose all trace of them. But the New Zealand sphenodons did not change. All was quiet in their right little, tight little islands. They had only birds as competitors—huge, stupid birds, which lost their wings.

you think it proved to be? Not the seat of the soul, of course, but a third *eye*. Animals used to have three eyes—two as now, and the third on top of the head. But for the sphenodon we should never have known it, and, as it was, pigs nearly kept the great secret from us. Soon we shall see why. The sphenodon was only a humble dweller in New Zealand, eating insects and worms and spiders, with perhaps a scorpion or two. The lords of the land were birds; the undisputed monarch was the greatest of all birds, the moa. Think of the biggest ostrich you have ever seen, then imagine it one quarter bigger, and you have some idea of the moa. For ages the moa was king of New Zealand, a tremendous bird, twice the height of the tallest man. That was the king moa; there were smaller birds, for moas were of many species, big and little.

THE CHILDREN OF AN OLD, OLD RACE



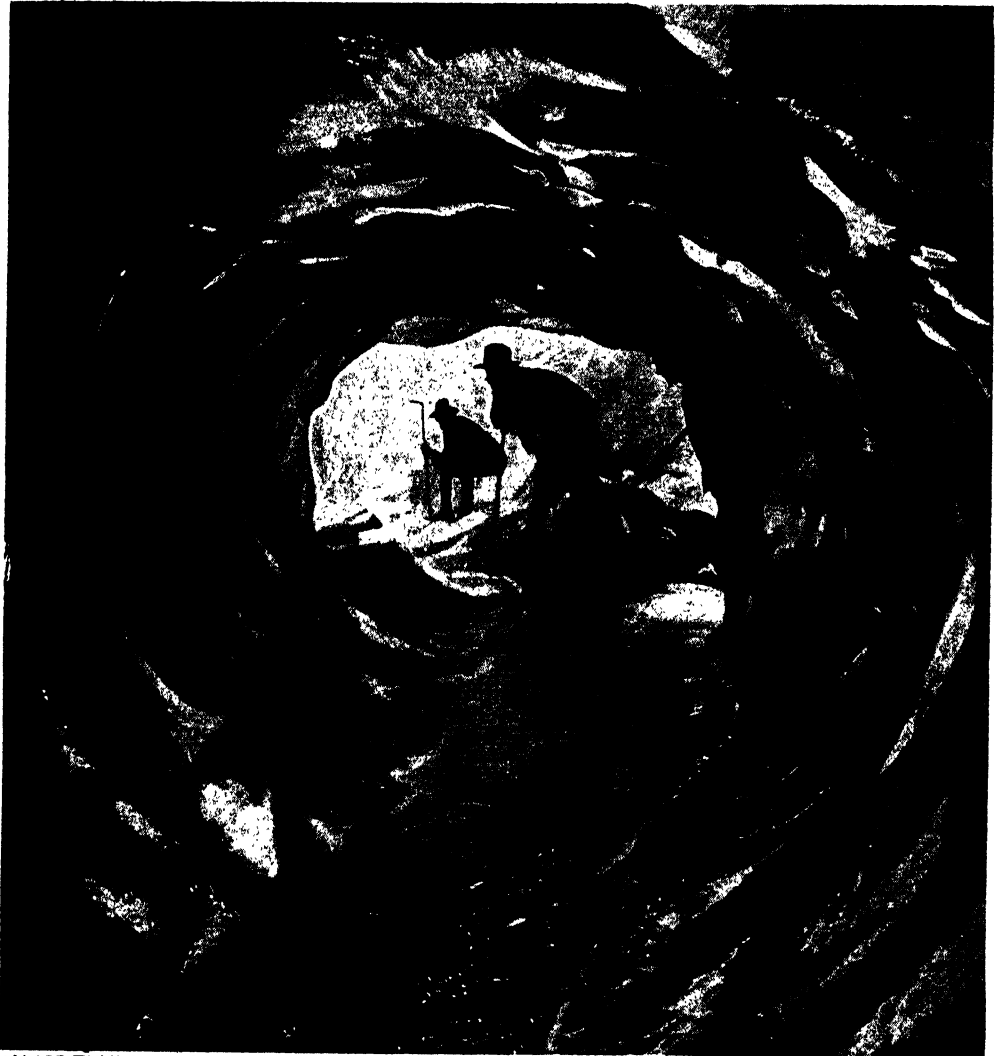
THE NATIVES OF NEW ZEALAND, DESCENDANTS OF THE FIRST RACE SETTLING THERE,
ENJOYING A MAORI DANCE

THE CHILDREN'S TREASURE HOUSE

long-legged and short-legged, thin-legged and thick-legged. But they all lost their wings. There was no need for them to fly. There was nothing in the land to fear, not a single flesh-eater, so moas grew enormously big, enormously numerous, and wingless. The land teems with their remains; and

coming species of bats, one kind of frog, and a dozen kinds of lizard. There were multitudes of beeches, pines, and tree ferns.

Five hundred years ago natives from the great group of Polynesian or South Sea Islands set out in mighty canoes, and sailed over the wide sea, an even more wonder-



AN ICE TUNNEL PIERCING THROUGH THE TASMAN GLACIER IN NEW ZEALAND FOR A DISTANCE OF FIFTY YARDS. SUCH A TUNNEL, OF COURSE, MOVES AND MELTS WITH THE GLACIER

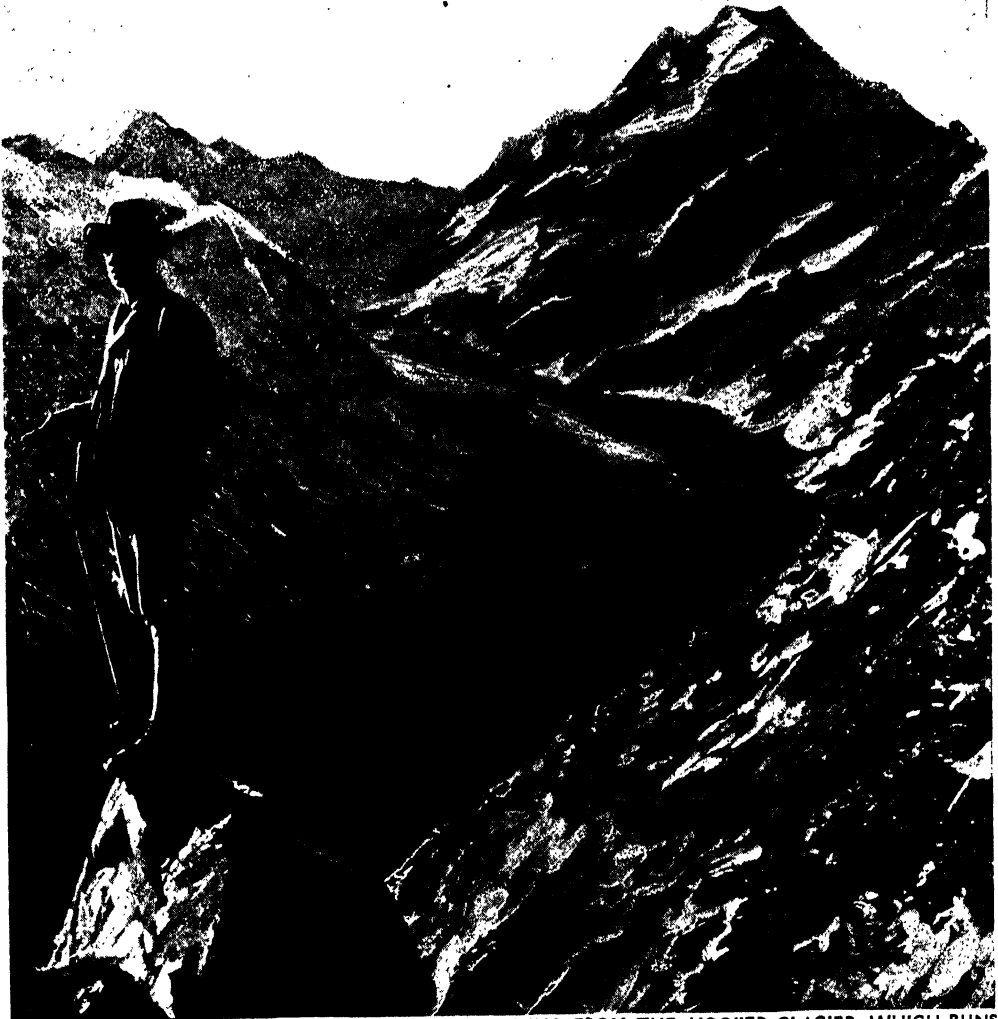
though there is not a living moa in the world today, we have numbers of their skeletons. We have been able to trace their plumage and their eggs; men have even found skeletons of moas containing pebbles swallowed by the birds. Giant moas bestrode the land and had it in possession for we know not what countless ages. There were many other types of birds, too. New Zealand was a land of birds, of two late-

ful voyage than that of Columbus. They landed at various parts on the two great islands, and were the first human New Zealanders. They took with them their dogs, and against their will, concealed in their little cargoes, they took Polynesian rats. These and their native sweet potatoes were their only possessions. The doom of the moa birds was sealed. For generation after generation the new-comers preyed

THE ISLAND OF SPLENDOUR

upon the moas and the kiwis. They ultimately exterminated the big birds; they killed off nearly all the lovely herons; they left but few of the kiwis—the small, ostrich-like birds, with long beaks and short, thick legs, with which they can kick like a young mule! Happily, the people had

these first settlers in New Zealand, the Maoris, were all men-eaters, even down to the reign of Queen Victoria. They were still living in the same old way when Captain Cook landed, in 1770. They killed and ate the crew of one of his boats. They were perhaps a hundred thousand in number



THE NOBLEST PEAK IN NEW ZEALAND—AORANGI, RISING FROM THE HOOKER GLACIER, WHICH RUNS 3000 FEET BELOW WHERE THIS ALPINE GUIDE IS STANDING

neither firearms nor bows and arrows, or the life of the birds would have been still shorter. Happily, too, the birds were widespread, and had the mountains for refuges. So the New Zealanders were driven to sea to catch fish and sharks, and to cultivate their sweet potatoes, and eat fern-roots and one or two other things which the land afforded. Also, they ate each other. The finest race of savages in the whole world,

when the great navigator arrived. They thought his ship, the Endeavour, was some gigantic winged sea-bird, and that the pinnacle in which he went ashore was the young of the mother bird; that the men were gods, and that the reports from their muskets were thunderbolts. But they ate the gods, at any rate, and pelted the invading sea-bird with stones and spears. Yet the great Captain Cook did for them something they

THE CHILDREN'S TREASURE HOUSE

had been unable in four hundred years to do for themselves. He took life to New Zealand. He gave them pigs and poultry, and a stock of seed potatoes. Higher animal life had begun to arrive at the lone, lost land.

The poultry multiplied exceedingly; the pigs ran wild all over the islands, and ate nearly all the sphenodons. Today the descendants of Captain Cook's pigs still run wild in the land. They became a plague in the country, so that in the end pig-hunters had to be appointed by the Government to hunt them down as vermin. A man would kill seven thousand pigs a year. The reptiles had a sore time with the pigs, and the precious sphenodon almost vanished from the mainland. It is preserved today on certain little rocky islands off the coast; and we must hope it will be strictly guarded, for we have no other land creature as high in the scale of life to compare with it in point of age.

The first white settlers in our New Zealand farmyard were escaped convicts from Australia. Some were eaten by the Maoris, some were adopted by them, and these had to take the food that their captors ate—pig, poultry, lizard, shark, potato, yam, or fern-root. That was all the country offered when white settlers began to arrive. The Duke of Wellington, when he was Prime Minister, refused to have New Zealand as a British colony; but it has been a British colony since 1840, and its capital bears the name

of the man who refused to have it. That, however, is history, and all we have to do here is to watch the white men entering the great dominion, and see how they got life there to fill the gaps Nature had left.

First of all they needed corn, but to plough the land they were bound to have horses and oxen, and these must have food.

New Zealand had none of the grasses usually found in other habitable parts of the world, no European grass for green fodder or for hay, and no clovers. All these had to be taken there. There was no fruit that could be eaten; it must be carried across the seas. There was one useful product, a native flax, out of which the Maoris had for hundreds of years made such garments as they wore; but the colonists needed something warmer than this. They must have wool, and there were no sheep to provide it. There was no tea, coffee, cocoa, or sugar; there was not an implement in the land save the rough tools of the Maoris. The forests had some of the finest trees in the world, but they had to be cut and carried and sawn. There was practically

nothing to eat, nothing to wear, nothing to use as tools, and there were no human companions save man-eating Maoris. It is impossible to exaggerate the strangeness of it all, for in its lack of animals and food-stuffs New Zealand differed from every other habitable land in the world.

But in the end the white settlers in



AN ANCIENT TENANT OF NEW ZEALAND WATERS—THE APUS



THE KIWI—THE NATIVE BIRD OF NEW ZEALAND, WITH LONG BEAK AND SHORT LEGS THAT KICK LIKE A MULE'S



THE LITTLE SPHENODON OF NEW ZEALAND, THE OLDEST BACKBONED LAND ANIMAL IN THE WORLD

THE ISLAND OF SPLENDOUR

New Zealand did get their farmyard; they got it in the most wonderful way. In one respect it was very sad. They had to hew down and burn thousands of acres of forest and woodland, destroying for ever many interesting forms of plant life peculiar to New Zealand. They destroyed the homes of birds and the little reptiles. It could not be helped, for civilisation was in a hurry; it was necessary to get land for corn and pasture. And so men burned and hewed the forests into great, clear

shown in the selection of other seed sent out—sow-thistle spread far and near; a yellow-flowered weed, innocent enough in our own pastures, revelled in the new soil, and killed sturdy grasses which were already well established. Then someone, in an unhappy hour, introduced our pleasant watercress into a New Zealand river. It spread from stream to stream, and grew incredibly; it developed into enormous growths, with stems twelve feet long and three-quarters of an inch thick; it choked



THE SOUTH AFRICAN OSTRICH SETTLES DOWN IN NEW ZEALAND

spaces. But even that was not enough; when they had formed their spaces, they had to send for grass seeds from over the seas, for their corn and barley and oats and rye and what not. *Everything that man and animals eat had to go to New Zealand by ship.*

And in carrying out this mighty enterprise the honest endeavours of the people were hindered and hampered in every way by villainy and tragedy. One wicked seedsman sent a load of dock seed for the seed of something else, and the weed won such a hold that it ran riot and exterminated other crops. Criminal carelessness was

the rivers and made navigation impossible. It used to cost £300 a year to keep the River Avon at Christchurch free from it.

The fact is that everything introduced into the soil of New Zealand, if it got root at all, behaved in the most extraordinary way. Although we understand why, the explanation is none the less wonderful. The new plant growths behaved like human invaders, making war on the native growths and conquering them, and afterwards fighting among themselves. A common yellow weed of British pastures, well behaved at home, where it is one of twenty things competing for existence, spread

THE CHILDREN'S TREASURE HOUSE

destructively out there, freed from all competition. • Given elbow-room in thin pastures, it became a giant of mischief, as the watercress had done in the rivers. Then there was the red sorrel, which behaved in the same way.

These strange conditions were not helpful to the making of a big farmyard; cattle and sheep and horses were threatened with starvation, while their natural fodder was being calmly strangled to-death by rampant weeds. They must have British grass and

be grown. White clover became at once an established success. So much a success was it, indeed, that, having been fertilised by the bees, it grew so luxuriantly that it fought a battle with the native flax, a splendid great plant five or six feet high, with great, iris-like leaves. The white clover, made strong by the bees, fought the flax and beat it, so that the native had now to be protected against the new-comer.

White clover was now a success, but what of the red? Red clover was a most important



BRITISH CATTLE IN NEW ZEALAND—FINE TYPES OF SHORTHORNS BRED UNDER SOUTHERN SKIES

clover. Well, in due season the clover—good, white, sweet clover—arrived. The seed was planted and the clover grew; it was a rare and happy day for the New Zealand flocks and herds. But, alas! the clover did not seed; it grew big and green and fine, but its flowers produced no seed.

What was to be done? There was a genius already in New Zealand, and he said, "Send home for some honey-bees." Bees were sent for, therefore; they were carried all the way to New Zealand, and they made the white clover permanent. They visited the flowers and fertilised them, the flowers produced seed from which new crops could

food, whose seeds were set at the same time as the white seeds, and with the same result. The honey-bees came and touched the white clover into abundance, but they left the red clover languishing, seedless, so that it had to be artificially renewed year by year. Again the genius came to the rescue. "The red clover is absolutely dependent upon the humble-bee," he said. "The honey-bee is useless to it." So humble-bees were taken to New Zealand, and they did for the red clover what the honey-bees had done for the white.

So a double victory was achieved. Under the friendly influence of the humble-bees,

THE ISLAND OF SPLENDOUR

the red clover grew so well that it not only joined the white clover in providing food for the animals; it fought the sorrel, which had been covering the land like a great red mat, fought it and vanquished it, choked it out of existence, and at the same time it killed off another noxious weed which had stolen in with other seed. Thus, the coming of the bees had made all things possible in the way of feeding stock. The clovers themselves were fine food, but they cleared the land of weeds, and so made it possible for other food crops to be grown. An enormous debt New Zealand owes to the bees.

Life was pouring into New Zealand now—human life, animal life, plant life, most of it good, some of it disastrous, in its effects. With growing food supplies, sheep, cattle, and horses multiplied enormously. This made it necessary to kill off the wild pigs, which were simply ruining agriculture and threatening other animals with starvation. In the province of Nelson alone a thousand pigs were killed every month for over two years. Some of the fine red deer which roamed Windsor Park when the King was a boy were sent out to the northern island of



SOPHIA OF WHAKAREWAREWA. A fine type of her race, keeper of the carved house below, who survived a terrible eruption thirty years ago and helped to save many lives



ONE OF THE BEAUTIFUL CARVED HOUSES OF THE MAORIS AT ROTORUA



"GOOD MORNING, MAORI"

New Zealand, and they have developed into the finest deer of their kind in the world. Other deer, taken to the southern island, have grown almost as wonderfully. They are all giants of their kind, bigger than their English ancestors, with finer antlers than any other red deer known. They run wild in the mountainous districts, where they have been joined by the noble American elk or moose, and by mountain goats.

But someone unfortunately made the same mistake with New Zealand as had been made in Australia. Rabbits were brought in, and ran wild. They became the weeds of animal life as the watercress had become the weed of the rivers. Freed from the competition to which their ancestors had been accustomed for ages in England, they multiplied at an appalling rate.

Though they have now been mastered to some extent, there are districts where the settler may still find it cheaper to uproot himself from his farm, and seek fresh woods and pastures new, rather than waste his time and money in battling with these destroyers of his crops.

All sorts of expedients were tried to get rid of the

THE CHILDREN'S TREASURE HOUSE

furry pests. Stoats and weasels and ferrets were brought in to help, but instead of attacking the rabbits they preferred poultry, birds, and young lambs, and themselves became a costly nuisance. There were insect pests to be combated, so all sorts of birds were shipped over, some for use, some for love of the homeland they were sent from—the sparrow, the lark, the robin, the thrush, blackbird, the greenfinch, the goldfinch, pheasants, partridges, quails,

large gardens with every fruit and vegetable which England produces, and many belonging to a warmer climate. I may instance asparagus, kidney beans, cucumbers, rhubarb, apples, pears, figs, peaches, apricots, grapes, olives, gooseberries, currants, hops, gorse, and English oaks, and also many kinds of flowers." And that, it is interesting to remember, was two days before Christmas. Gorse now runs wild in New Zealand, about eight feet high; and our lovely sweet briar



DESCENDANTS OF THE FIRST MEN IN NEW ZEALAND—MAORI WOMEN ON LAKE ROTORUA. THE CENTRAL FIGURE IS WEARING A CLOAK OF KIWI FEATHERS

turtle-doves, chaffinches, linnets, rooks. And some of the birds turned traitor. Farmers say that the skylark eats the blades of corn; the sparrow is a villain there as everywhere; and the blackbirds rob the orchards.

Intelligence and keen effort, however, have more or less mastered the situation, and, in spite of all the troubles which spring unexpectedly from acclimatisation, this is the sort of picture Darwin was able to sketch of a New Zealand home when he was there: "Fine crops of barley and wheat were standing in full ear; and in another part fields of potatoes and clover. There were

is one of the trials of the dominion, for it flourishes everywhere, even up the mountain-side, a giant growth, numbered with troublesome weeds.

Naturally, this sudden invasion of one of the oldest lands on earth by innumerable forms of animals and of plants took Nature in New Zealand by surprise. Nature had slept there in peace. She had not armed her plant children with spikes and spines and prickles such as we find in our Motherland, to say nothing of tropical countries where the cactuses are. We in this country have about eighteen species of prickly growths;

THE ISLAND OF SPLENDOUR

New Zealand has apparently only two. One is the prickly rubus, a trailing plant without leaves, armed with prickles, it is supposed, against the New Zealand snails, some of which are monsters, with shells three inches long. Then there is the "wild Spaniard," as it is called, a spiny herbaceous growth. This armament was evolved, scientists believe, to preserve the plants from being eaten or trodden down by the great moas which roamed the land for food in ages past. The moas are gone, but the wild Spaniard keeps his prickles, and will need them more than ever now, as will the trailing rubus.

Little by little, then, our beautiful New Zealand was populated with men and women and children, with animals and birds and insects and plants. Let us not forget

on board, so a huge mass of ice was placed over the egg-cases, wrapped in flannel, and enclosed in sawdust. Gradually, during the voyage of 13,000 miles, the ice would diminish, and with the rising temperature the eggs would hatch and the young fry would die. Or perhaps the life in some of the eggs would perish, and the whole cargo would be attacked by a fatal fungus. But in the end we learned how to carry the eggs and keep them cool all the way. Then British eggs were hatched there; and the myriads of trout and salmon which brighten the waters of New Zealand's leaping rivers are descended from the eggs carried half-way round the earth in the little boxes packed by English naturalists.

That, then, is the story of how men took life to New Zealand. That is how



THE GRIP OF WINTER ON LAKE WAKATIPU, QUEENSTOWN

two other invaders. Our wretched brown rat arrived there in ships, and has exterminated the harmless little rat which stole into the land in company with the Maoris; and our detestable house-fly has arrived also, and is gradually exterminating its native cousin.

There remain now only the waters of the rivers to consider. These had few fish when the white men arrived, but today they have enormous trout and salmon, and other British fresh-water fish. The salmon and trout were carried there, some from California, but most from our Scottish and English rivers. They went out as eggs, carried in moist cases kept cool by ice.

The story of their getting there is a romance in itself. When attempts were first made, the ships had no plant for making ice

she stocked her farmyard and peopled her rivers and streams. There is no other story like it anywhere, and New Zealanders do well to be proud of their achievement, as we, their kinsfolk, do well to be proud of them. It is good to think that the Maoris, the brave, fighting cannibals of the early days, share today in the spreading of life in the great southern islands. They have accepted civilisation, and have become farmers. Their numbers are reduced to fifty thousand, but they have now been educated, and there were Maoris with university degrees fighting on Gallipoli. There is no finer or more lovable race of people than these people, the first human inhabitants of the land to which we have taken so many forms of life, yet none more precious than their own.

THE GREATEST MONUMENT ON THE EARTH



THE PYRAMIDS, 6,000 YEARS OLD, STANDING IN THE SANDS AS WHEN ABRAHAM MUST HAVE SEEN THEM



THE SIX-MILE AVENUE OF ACACIA TREES LEADING FROM OUTSIDE CAIRO TO THE PYRAMIDS



Old Cairo, with the tombs of the Caliphs, and the Citadel in the distance

THE GREAT SIGHTS OF EGYPT SIX THOUSAND YEARS BACK IN SIX DAYS

CAIRO
THE world has made haste since Pharaoh died, but nothing more wonderful has happened under the sun than the change by which we may sit reading the Children's Treasure House in London on Monday morning, and on Saturday may cross the desert at Thebes, and walk among the Tombs of the Kings. In one week we may walk on the ashes of two dead empires; we may look on the ruins of Rome and walk among the ruins of Egypt. Between one Sunday and another we may sit in the shadows that fall from all that is left of the palaces of Cæsar and the temples of Pharaoh.

To an Englishman who all his life has lived through winter at home, no words can exaggerate the revelation of the journey which begins at Charing Cross at eleven o'clock in the morning, carries him through France and across the Mediterranean in six days, and delivers him, safely packed, in Cairo. We go six thousand years back in six days.

It is strange to arrive after so swift a journey from London in such an old corner of the world as Port Said, where the traveller for Cairo parts from the traveller for India. The ship sails on its way to India, up the Suez Canal into the Red Sea; he who goes to Egypt takes train for Cairo, and rides for four hours, catching glimpses of the canal

here and there, and peeps of queer corners of Egypt, and swift sights of battlefields on which was established for ever the power of England which has cast out barbarism from Egypt, and is building up on the banks of the Nile a country which may one day be, let us hope, greater and mightier and nobler than the Egypt that Moses and Rameses knew. And at last, in less than a week since we left Charing Cross, we step out of our train in Cairo.

Nothing that the traveller has ever seen is quite like Cairo—if he has never been to India, or Damascus, or Constantinople. The colour of Cairo is something that the traveller never forgets, with its panorama of human life which never ends; the tens of thousands, hundreds of thousands, of lives which nothing seems ever to perturb; the glow of the city in the sun from the height of the Citadel, with its miles of domes and minarets; the population moving like ants on a hillside, with the river which brings life to Egypt winding in the background; and far beyond, ten miles and more from where he stands, the Pyramids and the desert. One wonders if there are six scenes in the world so vast, so solemn, so thrilling as this city on the edge of the desert, in the glare of the noonday sun.

Cairo itself is wonderful. Only a great artist or a great writer could hope to give you some suggestion of its

colour and its humanity. Never have my eyes beheld such a blending of colour, or such a mixing of peoples, or such a living picture of the Old World. You are not surprised to be told that in those bulrushes Pharaoh's daughter found Moses; your surprise is that Moses is not there. You wonder if that group of Bedouin Arabs in the desert are Joseph's brethren; for all the change that has taken place they well might be.

Hawks fly past you as you walk in the street, buffaloes draw carts and ploughs, white donkeys and black ones bear half the burdens of the town, boys and girls in flowing robes build houses instead of learning alphabets. The faithful Mohammedan prays in the field; the unfaithful cries "Backsheesh!" as you pass. The women hide their faces behind thick and ghastly veils; the children alone seem even as you and I.

THE GORGEOUS BAZAARS PACKED FROM MORNING TILL NIGHT

These wonderful bazaars I can never describe, with their *thousands* of sellers and seemingly no buyers: packed with everything in the world that nobody wants; with the most appalling things to eat and the richest things to wear; with the gaudiest and most miserable jewels; with shoemakers, polishers, tailors, jewellers, coffee-grinders, and a host of busy folk working in the doorways, or in the open fronts of shops; with every kind of work going on before your eyes; with the filthiest hovels on earth packed with gorgeous colour. Never before have I seen such splendid rubbish-heaps.

And the houses of this motley multitude—do they reach to the sky? And the pavements—are they the factories of Egypt? At every turn some little group is busy roasting chestnuts on the kerbstone even at midnight; making coffee for the passers-by on the flags; displaying their rings of bread and plates of strange confections on the dirty ground.

See the white donkeys with their blue necklaces, the crowds of cows and buffaloes and camels in the road; hear the cackling hens in the shops, the stray sheep and goats in the busy streets. Hear the moaning of the carpet-man, the solemn dirge of the prayerful man. *Feel* the misery of these happy people. Smell their streets and shops. Escape, if you can, from the heap of fish in that window, from the basket of onions in this,

from the carcass in that butcher's shop. Turn the corner and see their tobacco shops, the daintiest imaginable. Step inside their mosques; put your feet into their yellow sandals and see them at their prayers. Climb their steep hill to the Citadel and see the glory of Cairo, the wonderful, unmatched, and unforgettable panorama of a hundred square miles of domes and minarets sparkling in the sun.

THE SCENE UPON WHICH THE SUN HAS SET FOR CENTURIES AND CENTURIES

See Father Nile flowing, as he has flowed ten thousand years, still bearing a prehistoric craft past great palaces and banks lined with palms; with the dim background of the distant desert rising against the sky, the great Pyramids of Ghizeh, ten miles distant, plainly seen, and those of Sakkara, more distant still, looming beyond.

Stand here on the Citadel and watch the sunset over it all, and remember that the sun has set over it for more centuries than you can count years—unless you are getting old; that in the plain before you empires have been born, empires have been lost.

People the arena with the great immortals—Julius Cæsar, Mark Antony, Cleopatra, Moses, and the Pharaohs; and then—then walk slowly down the hill, see the human relics of this great greatness, and wonder what life and the world means. Take a carriage at the bottom, and drive ten miles. Three miles bring you to an avenue lined with trees—"the avenue that never ends," and about you are oranges, bananas, and dates in the gardens, and buffaloes at work in the fields, led by men in long blue robes.

THE GREAT SHADOW THAT CREEPS ACROSS THE SAND

But let them pass. Ahead, just in front of you, at the bottom of the way, stand the Pyramids. A mile goes past, and then another, and another. Still more miles pass, and more—and still, in front of you, these great things rise. Rub your eyes and be sure you do not dream. . . . Then at last the desert, the greatest structures that were ever built in stone, and the strange, ugly Sphinx.

We are at the Pyramids, the most famous spot for travellers in all the earth, and we watch the shadow of the Great Pyramid—the greatest of the three—creep along the sand. As we sit in the sand, looking at this huge thing,

THE LIFE OF AN EGYPTIAN BOY



THE GREAT ARAB UNIVERSITY AT CAIRO, WHERE THOUSANDS OF BOYS STUDY THE KORAN ALL DAY



ARABS DRAWING WATER FROM THE NILE WITH THE SCHADOUF A SORT OF SEE-SAW WITH BUCKETS

THE NEW-BORN LAND OF IMMEMORIAL TIME



YOUNG NUBIANS ROWING OVER THE SUBMERGED ISLAND OF PHILÆ TO THE TEMPLE OF ISIS



EGYPTIAN BOYS AT AN ARAB SCHOOL AT ESNA, A VILLAGE ON THE NILE

EGYPT IN DAYS GREATER THAN PHARAOH'S



PLOUGHING WITH A CAMEL TEAM ON THE BANKS OF THE NILE



THE DROWNED TEMPLES OF PHILÆ—SUBMERGED BY THE WATERS OF THE NILE DAM

with neither beauty nor usefulness to plead for it, it is hard to think what we shall say about it. The sun shines down on it to-day as it shone on it when Abraham and Moses looked at it, and a thousand years before. The moon looks down on it to-night as on that night when a mother brought her Child down into Egypt to flee from the cruelty of Herod.

THE USELESS LABOUR OF A HUNDRED THOUSAND SLAVES

The Great Pyramid is the greatest monument ever set up on the earth, and the only monument on the face of the earth which looks to-day, at any rate from a distance, almost exactly as it must have looked 6,000 years ago. It is less useful in the world than a pin; it has no inspiration to give to us; it is simply the most terrible heap of stones that has ever been piled up by human hands. And yet we sit in the sand and gaze at it with wonder, for it speaks of a time that can never come again in the world, of a time when a man could chain a hundred thousand men and drive them to labour like beasts of the field.

For twenty years a hundred thousand slaves worked to build this single pyramid, the greatest of the three that rise from the sand near Cairo; and they made this pyramid, which was merely to hold the dead body of a king, nearly three times as big as St. Peter's in Rome, and fifty feet higher. Its foundations are set in thirteen acres of sand, which would more than cover the whole of Lincoln's Inn Fields in London, and the stone it contains is nearly 90,000,000 cubic feet, or enough to make a narrow pathway, a foot wide, two-thirds of the distance round the earth.

THE DARKNESS INSIDE THE GREAT PYRAMID

A few miles across the sand lies Cairo, and through Cairo runs the Nile. Six hundred miles up the Nile is the great Assouan Dam, $1\frac{1}{2}$ miles long, 90 feet thick at the bottom, 90 feet high, and 20 feet thick at the top; and this huge Nile dam, holding up enough water to make the desert of Egypt blossom as the rose, has just about a quarter of the quantity of stone that is piled up in this great pyramid! Somebody has reckoned that if the pyramid could be made to slide on its base it would need a hundred million men to drag it along.

It is hard to understand the feeling which prevails upon the traveller to climb this monstrous thing, a perilous and difficult climb, needing two or three men to help, and taking hours; it is easier to persuade oneself to go inside, but he who has once been in will surely never wish to go again. A small hole, which exactly faces the North Pole, leads into a long, low, descending passage, through which three Bedouins lead us into this dark and terrible place, and we fumble on hands and knees, and climb up slippery slopes, and walk along narrow ledges, and are slung through holes until the darkness and the weirdness are almost more than we can bear.

And, with a sigh of infinite relief, we reach the little chamber in the very heart of the Great Pyramid, with the tomb of the builder in the centre of the floor and with millions of tons of masonry above our heads—enough of it, men say, to have hidden away miles and miles of galleries such as we came through, and more than three thousand chambers such as this in which we stand.

THE RIDE TO THE PLAYGROUND OF MOSES

An overwhelming thought it is, a terrifying place it is to stand in, and all that we have in the world we would give for the breath of air that lies beyond these dark winding passages, hundreds of feet away. Our Arab guides know it, too, and this place and this moment they choose to squeeze from their victim as much of his pocket as he will unwillingly let go. And the traveller pays, takes up his candle, and gropes his painful way back to the desert and the sun.

He is glad to mount his camel, to ride quickly by the ugly Sphinx, which, if he is wise, he will come again to see by moonlight; and on he rides, across twelve miles of sand to Memphis, through the lovely groves of palms which rise from the playground of the little boy Moses, whose home was here in the days when Memphis was a great town. One of many wonderful rides it is that the traveller takes from Cairo, and always he comes back to Cairo as to another world, back from the desert to these strange, old, crowded streets, in which every face he sees seems to belong to another race.

But it is not Cairo, even with the Pyramids, which most moves the traveller who comes to Egypt for the first

time. He is loth to leave it, glad to come back to it, and never for a moment lets the spell of it go. But Cairo, after all, in spite of itself, is of this world, and there are great cosmopolitan cities elsewhere. It is when he takes the train from Cairo at half-past six in the evening, and steps out of it at Luxor at half-past eight in the morning, that the traveller really feels that he is in another world.

THE SLEEPING KINGS IN THE DEPTHS OF THE MOUNTAINS

Under his feet lies Thebes. Buried beneath mud huts and desert sands, the thud of a hundred axes, the tread of camels with their burden of earth, the incessant plodding of an army of excavators digging up spadefuls of history, come to him like an echo from the lost city that was once the capital of an empire. Before him rise the impressive columns of the temples of Luxor, from which, 3,000 years ago, an avenue of sphinxes over a mile long led to the great temple of Karnak. He flings his guide-book down as he gazes on these vast remnants of an empire which was great before Greece and Rome were born. It is nothing that this courtyard is 400 feet long, that those columns weigh a hundred tons each. It is everything that here sat Rameses, that here came Alexander, that here was the heart of the world in an age of which his mind cannot even think, that the stones rising to the sky from his feet were placed there by the greatest builders that the world has ever known, thousands of years before the toy church of St. Paul was set up at the top of Ludgate Hill.

Who shall describe the glory of the Tombs of the Kings? Surely nowhere in the world is the sublime so near to the ridiculous as these mountain tombs of Thebes to the donkey-boys, who walk to them daily and see no marvel there.

THE MARVELLOUS TOMBS WHICH MAKE US FORGET THE PYRAMIDS

"They think we are mad," said one who knows them well, when I asked him what the donkey-boys think of Englishmen coming to see the tombs and temples of Thebes. They would sell us any fragment of any tomb, any carving from any wall, any head of any figure, any scarab or mummy or vase fifty centuries old, for five piastres, or, if we protested that it was too dear, for three. And yet these tombs are like nothing else in the whole

earth. The Pyramids are ordinary. Westminster Abbey is a child's toy compared with these amazing chambers of the dead.

Crossing the Nile from Luxor, an hour's ride in the desert reveals the valley of the tombs. For hours, for days, perhaps, we may ride over them and not take the same road twice. From their heights the great statues of Amenhetep; the Rameses urn, with the statue of Rameses, weighing a thousand tons; the beautiful temple of Medinet Abou; Luxor; Karnak itself, are seen in miniature as though through the wrong end of a telescope. Deep down in the heart of these mountains, in spacious chambers fit for kings to live in, the kings of Egypt lay in their coffins.

Think of the most impressive place where all that remains of a king of men can be laid—of the heart of Livingstone, in the heart of his own Africa; of Cheops, in the terrible loneliness of his Great Pyramid; of Cecil Rhodes, at the summit of the mountain from which he looked down upon a continent; of Mohammed at Medina; of Napoleon, of Nelson, of Wellington, under the very pavements of their country's capitals.

THE LITTLE BOY WHO SLEEPS NEAR A KING

And none of these resting-places of immortal men can be likened, for an impressiveness that is thrilling and overwhelming, for a great silence that can be felt, for an imagination that has in it poetry, and music, and terror, and prayer, and strength, and wonder, to the graves of the dead kings of Egypt.

Hundreds of feet deep in the mountains, through chambers cut in the solid rock, within sculptured walls bearing the history of their lives, as rich in colour as if the paint had dried upon them yesterday, Amenophis II. lies in his coffin as his people left him there three thousand years ago. In a smaller chamber, among the dust on the ground, lies a beautiful woman, her black hair falling over her shoulders, who played, we are sure, with the princes in the king's palace 1,500 years before Jesus Christ was born. And as we gaze upon her face, forgetting that thousands of years have passed, we wait for her to turn in her sleep and kiss her boy, who lies beside her, with his father on his left.

We came to Luxor by train; let us go back by boat. From Luxor we take boat to Assouan, and see the great Nile

dam, and at Assouan our boat turns round and sets our faces homeward. Six hundred miles down the Nile is Cairo, and slowly down the great river we go. Here on the banks as we pass is Egypt at home. Here are the mud huts of to-day; here are the broken temples of yesterday. It is the land of contrasts.

Never have so much change, so many varied scenes, so many aspects of life itself, so many types of people, such an endless transformation of human and natural things passed before me in so short a time. It is like a cinematograph, throwing upon a screen, all in an hour, every kind of life in every part of the world in any age that has ever been.

THE VAST ETERNAL THRONG THAT LIVES AND MOVES ON THE BANKS OF THE NILE

And we sit on donkeys or on camels, or on the sunny decks of steamers, or stand in mud houses, or lie under palm-trees, or rest in great temples, or look out from trains, and see this great world move past—a vast, eternal throng. If you turn to your map of Egypt, you will find, lost on the banks of the Nile among sugar-canes and palm-trees, a place called Edfou. We have just left it, climbing to the height of its great temple, tramping its dusty streets, and parching with thirst at the very sight of its mud town. But it is not of these things that I would give you a picture if I were skilled with brush or pen, and if this burning sun—which fascinates me, though it scorches me—would let me be.

In the background from our boat stands the temple, the best preserved of all that we have seen, standing as the Ptolemies built it before the world had ever heard of England. A dusty lane leads from the landing-stage to the mud-built town, with the minaret outstanding to remind us that the things of this world pass away. Women and girls are coming with their water-pots—those wonderful things which they carry on their heads as we carry our hats.

THE SIGHTS AND SOUNDS IN THE FIELDS OF EGYPT

At the riverside a group of women are busy, washing. Some of them are washing themselves—scrubbing their black legs till they are almost white; but most of them are washing their robes, and spreading them out on the rocks to dry. Behind them stand a dozen donkeys, with donkey-boys and dragomans, half a dozen boys asking for English books

and one or two for backsheesh, and a motley crowd of folk—white, brown, and black—in black robes, white robes, and blue robes; in black turbans, white turbans, and blue turbans; and in fezzes of almost any colour.

In the shade of the hill sit four splendid Arabs, with handkerchiefs spread before them on the ground, covered with imitation antiquities which they will not sell, surely, if they sit till the crack of doom. Over the hill come two camels, laden with stuff from the quarry where a dozen natives are excavating an ancient temple. In a moment the camels are lost in a cloud of dust, which comes and goes as if it were a speck in a hurricane, though the wind is as calm as the Nile. Along the bank the schadoufs are working—the quaint and clumsy water-carrying instruments which still, as for thousands of years back, carry the waters of the Nile into the fields around. In these fields buffaloes are ploughing, sugar-cane is growing, palm-trees rise in the distance; and beyond it all lies the range of mountains which never break, and are the beginning of a desert stretching for only the books know how many hundreds of miles.

THE BOY WHO LOOKS TOWARD MECCA

As our boat leaves this stopping-place, a fine Egyptian gentleman, the Sheik of his district, lands, amid the salaams of the people, the Arab crew break out into the plaintive hymn which marks the setting off of every boat and its arrival, and our steamer looks ahead, to the sailing boats that look like poetry far up the placid Nile. And on, and on, and on we go, through the wheat-fields on one side and the desert on the other, with no sign of life save the naked Arabs at the schadoufs, and now and then an odd mysterious figure in a flowing robe, who seems to be lord of the world. It is as if noise and strife and toil were dead, and the beginning of the world had come. There, on a boat, as we pass, an Arab boy looks to Mecca and says his prayers, and we know that he, too, belongs to the long line of human lives which will meet some day about the throne of God.

For him, too, the world was made; for him the sun shines and the seas roll. For he is of the race of men before Egypt was, and after Egypt is forgotten. He is your little brother, and mine.

ARTHUR MEE

THE ROAD OF A THOUSAND WONDERS A RIDE THROUGH AFRICA

ONE of the greatest romances of all time is being written in iron and steel from end to end of the African continent, where men are slowly building up a line of communication which we call the Cape to Cairo Railway. The very name of the railway is thrilling, for it means piercing the heart of this vast, mysterious continent. It will stretch for a distance of over 5600 miles, more than a fifth of the entire circumference of the earth ; it will link together by the bond of civilisation varying conditions such as can be found nowhere else in the world. The work itself will represent the highest engineering skill, reaching places where civilisation has hardly yet begun to dawn.

At the Egyptian end the railway will pass through the Land of the Pharaohs. It will pass—indeed it already passes, for the Egyptian part is complete—through scenes in which the earliest civilisation developed—where men built great cities and wrought sculptures which are still among the chief wonders of the world ; where the first great school of learning grew into being while men in England were living in caves, fighting with beasts, eating nuts and berries and the wild herbs of the field. This railway may cross the very footprints of Jesus, for He was taken into Egypt in His childhood to escape the wrath of Herod, who sought to slay Him. It will pass through the scenes of the life of Moses ; it will carry grain and riches and means of life across the land which Joseph saved from famine ; and it will touch, at Alexandria, the place in which, as far as we know, steam was first made to be the obedient servant of man.

The great engines will snort and puff and draw their heavy loads where Hero used to walk, the Hero who invented the first steam-engine, and made it open and shut the doors of the temple, so that the astonished people imagined that spirits turned the wheels.

Now let the mind leap forward two thousand years, and see how little the uncultured human mind changes. When Lord Kitchener was building his railway in the wild Sudan, his work was watched by men such as had come, after the last of the Pharaohs, under the sway of the Greeks and Romans. The ancestors of these men thought that Hero had imprisoned a spirit in his little engine working at the temple. And the Arabs watching Lord Kitchener building his railway thought exactly the same, one old Arab chief solemnly protesting to Lord Kitchener that it was cruel to make the spirit in so small an engine drag so many trucks ! At the same time, at the other end of the continent, the railway was built in Matabeleland, where black, naked warriors, ignorant as were the British in Egypt's great days, dwelt in childish simplicity.

What thought they of the white men's fire horses ? To them the engines and their moving trains represented so many teams of oxen caged up inside. When the trains stopped, the natives waited with wonder and excitement. " Why don't you let the oxen out ? " they asked, imagining that the white men had chained up bullocks inside the engine and made them drive the trains. Old Hero, in his Alexandrian workshop, was two thousand years before his time—the children of the desert and the children of the forests are two thousand years behind. Yet the railway is for them, and could not have been built without their aid.

The contrast between these two kinds of people give us a clue to the changing scene through which the great line passes—just a clue and no more. For, starting in the north, where Egypt with its buried treasures lies, the line goes south across historic battlefields, where teeming armies fought for thirty years and Gordon fell a martyr.

THE CHILDREN'S TREASURE HOUSE

The shining steel runs on and on to the great lakes of Equatorial Africa; it passes through dim forest lands where pygmies dwell; it rushes through the haunts of lions which sometimes try to tear the drivers from the engines, through the homes of the rhinoceros and hippopotamus, and past places where jackals and hyenas howl at nights and mumble the bones of dead giraffes. It passes the graves of 30,000 poor, foolish people who, on the advice of their witch doctor, slew their cattle and left themselves to perish, because the medicine man had told them a god would arise from the earth to drive the white men to the sea and give their riches to the natives. It touches a lake three-quarters the size of Ireland, and another 2670 feet up in the air. It crosses the mighty Zambesi near the matchless Victoria Falls, where the sun makes rainbows all day long in the spray.

FROM THE LANDS OF SAVAGERY TO THE LANDS OF GOLD

It rushes from savagery and the silent splendours of Nature to the lands of gold and diamonds, and finally it comes to the end of its journey at the foot of the continent, at Cape Town, with the blue waters of the Atlantic tossing and heaving as they tossed and heaved when Cleopatra was queen of the north, and the south was wrapped in mystery and terror which no man dare explore.

That is the Cape to Cairo Railway, not as it is, for it is not yet completed, but as it will be when the links now missing are forged. But it will never, perhaps, be a continuous line. No single train will go the whole way. For even when the line is finished we shall leave the train and sail some distance on the great inland waters, on lakes and on the bosom of the Nile. While this great railway backbone for a continent is being built from north to south, lines running east and west will serve to link it up with other parts. The Uganda Railway is already complete, running from Mombassa, on the south-east coast, north-west to the inland sea which we call Lake Victoria Nyanza, a body of water 26,000 square miles in extent.

THE GREAT DREAM OF DAVID LIVINGSTONE THAT IS NOW BEING REALISED

On the west coast a line runs inland from Lobito Bay, in Portuguese Angola. So far 300 miles of this line have been built, and it is being hurried on to join a branch of the Cape to Cairo Railway at Kambove, in the Katanga district of the Congo Free State. It is hoped that here we may

obtain possession of a narrow strip of land from the Belgians, the owners of the Congo Free State, enabling the line to continue its way into Northern Rhodesia over British territory. But the line from Lobito Bay will be more than a tributary of the greater line. It will be carried on to link up with a railway already running inland from the east coast at Beira. With that complete we shall for the first time have a line actually crossing Africa.

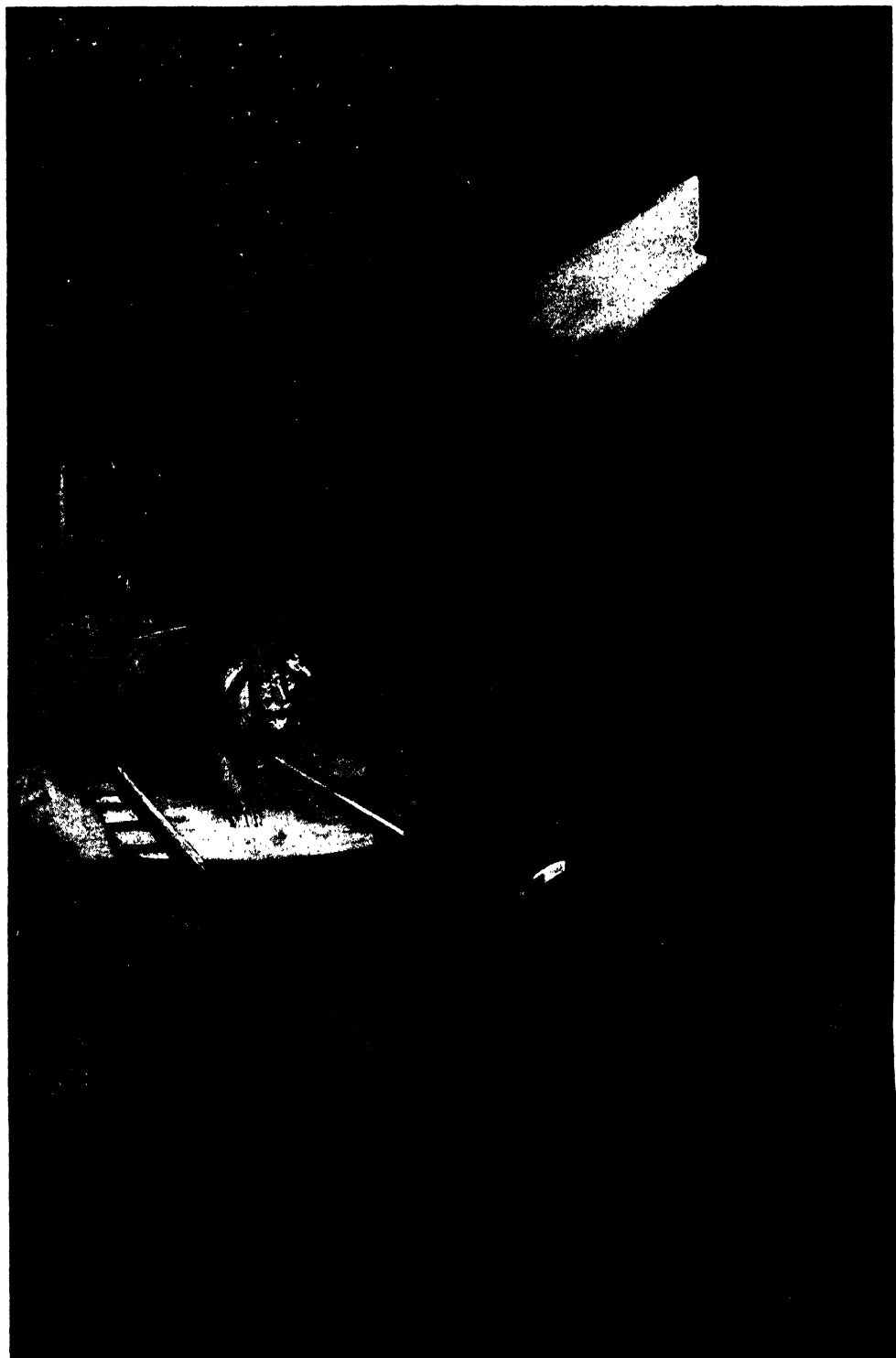
One of Livingstone's dreams will be realised when that is accomplished. When he was on the first of his great journeys through the land of mystery, he came upon a mighty river, 300 yards broad, right in the heart of the country. To his joy he found that it was the Zambesi, which had been supposed to rise hundreds of miles to the east of this point, quite near the east coast. The heart of Livingstone leapt with gladness. "Now I know there is a waterway to the east coast," he said. But he did not follow it at once. He turned his face to the west. "I must find a highway from the west coast," he said, "for it is to the west coast that English ships will come, to bring money and goods in exchange for the things the natives have to offer. Once a proper trade is established, we shall end the slave trade."

THE LINE OF STEEL THAT IS COMING FAST IN THE STEPS OF LIVINGSTONE

He knew that regular commerce would prevent men from selling their women and children to the slave-dealers, and he knew that by finding a highway and establishing a proper route the brutal slave-raiders would no longer dare to carry fire and sword into the secret places of the land, to burn down villages and carry their people away captive. When he had found his way out on the west coast, Livingstone turned about and marched across the continent to the east coast, and it is thrilling to know that the first railway across the continent will follow practically in his steps. Lobito Bay, on the west coast, is near Loanda, where Livingstone came out; Beira, on the east coast, is near Quilimane, where he found himself after his great march to the east. He yearned for a railway along that route. It is coming, building fast. But his son, Tom Livingstone, said to a friend, "Let us go from Cairo to the Cape and preach a railway. It shall be called Livingstone's Line."

That line, too, is coming as fast as men can build it, but it is called the Cape to Cairo Railway. The making of these railways in

THE KING WAITS FOR THE TRAIN



THE ROAD OF A THOUSAND WONDERS—THE "CAPE TO CAIRO" FLIES PAST THE JUNGLE IN THE STILLNESS OF THE NIGHT

AFRICA IN A HUNDRED YEARS—THE DARK CONTINENT IN A FLOOD OF LIGHT AND POWER



THE CHILDREN'S TREASURE HOUSE

Africa stands for more than anything that has been done by engineers before. The line runs through deserts where there is no water. It runs across rivers and gorges and chasms. It runs up hill, down dale, and skirts mountains; it goes through forests and thickets where only wild beasts and wild men have their habitations. For a great part of the way the line has followed the track of men who went on just ahead, surveying and mapping a way as they travelled. The route for the railway was planned while the line was actually being built. Material has had to be made in England, Scotland, and Wales, bridges built in England and put up, then taken to pieces and packed in boxes and sent to African ports to be carried up country by bullock waggon, by railway, and by caravans of porters. Every

tool has had to cross the sea, every engine has been carried out in pieces and put together on the spot. Mysterious illnesses have seized the engineers, sleeping sickness and deadly fevers have attacked the men; lions have killed and carried off scores of workers; the terrible "white ants" have eaten the telegraph poles and railway sleepers; elephants have knocked over engines, and natives

have been hostile and dishonest. War has raged at both ends of the line since the work was started. The whole history of the colonisation of this vast continent has, indeed, been compressed into the story of the building of this line

It makes us proud to reflect that, in spite of all these difficulties, the work has gone steadily on, until now, starting from the Cape, the line runs runs northward to Bukama, 2500 miles from Cape Town, and, starting southward from Cairo, the line runs for hundreds of miles south of Khartoum. It needs but the addition of a few hundred to enable us to say that we can travel by steam from one end of the African continent to the other.

Let us see what the route actually is. We start from Cape Town, and run up through Cape Colony to Kimberley, in British Bechuanaland, on to Mafeking, and across the Kalahari Desert to Bulawayo, in Matabeleland, which is now part of the vast territory called Rhodesia. Then we turn north-west and cross the Zambesi at Victoria Falls, after which we bear to the north-east and run right up Northern Rhodesia until we come to what we will call its middle boundary. Here, for the first time, our line leaves British territory. It strikes north-east into the Congo Free State up to Bukama, its northern terminus at the present time. We have left British territory then, after over 2500 miles.

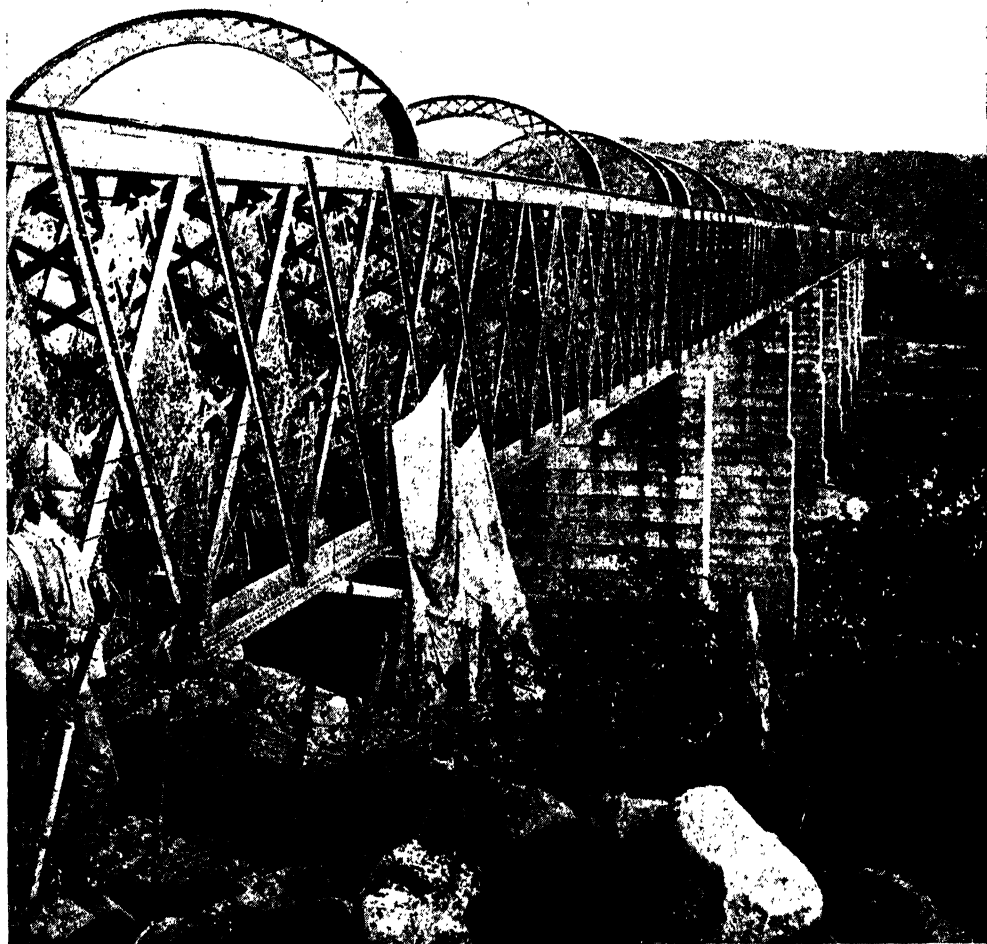
By bearing sharply away to the north-east we could still keep on British territory for



A TIRED NATIVE FALLEN ASLEEP IN A SWAMP

some distance farther, but here, at the northern limit of the western half of Rhodesia, we have a wedge of the Congo Free State dividing British territory. This great Congo State belongs to Belgium, and continues side by side with the western frontier of Northern Rhodesia, then along the left or west bank of Lake Tanganyika, right away to the southern boundary of the Sudan. But at the northern end of the lake it marches side by side with British East Africa, in which Uganda is included. Now it is proposed that Belgium shall give Great Britain a narrow strip of land along the western shore of Lake Tanganyika, so enabling us to run the railway on British territory right to the lake. Lake Tanganyika itself is open to the vessels of all nations, so that we can continue our journey by steamer to its northern limit, after which we should use Lake Albert Nyanza and other watercourses in the same way, so reaching British East Africa and then the Sudan. From here we have the splendid Nile waterway, on which steamers are always plying, until we reach the railway which takes us into Khartoum,

THE GREAT BRIDGES ACROSS THE RIVERS



THE LONG BRIDGE ACROSS THE ORANGE RIVER IN SOUTH AFRICA



THE BRIDGE WHICH CARRIES THE CAPE TO CAIRO RAILWAY ACROSS THE KAFU RIVER IN RHODESIA

THE CHILDREN'S TREASURE HOUSE

now a marvel of civilisation, once the great slave mart of the Sudan. From Khartoum we ride the whole way by train to Cairo, and our wonderful journey is at an end.

We have now only to bridge the distance between Bukama and Lake Tanganyika, and to fill in one or two other gaps, and the line through the heart of wealth and splendour, through savagery and wilderness, through terrors and mysteries all wonderful, will be finished.

THE GREAT MAN WHO LIES ON THE HEIGHTS OF THE MATOPPO HILLS

It is a dazzling scheme, and we owe it mainly to one man, Cecil Rhodes, who lies now buried in a stately tomb on the heights of the Matoppos Hills, past which the railway runs. Mr. Rhodes went out to South Africa as a young man and an invalid, recovered his health in the fine bracing climate he found there, engaged in gold and diamond mining, came home and finished his education at Oxford University, then went back and gave himself entirely to the development of South Africa. When he took up railway building, the line extended only to Vryburg. Rhodes raised money and carried it first to Mafeking and then on to Bulawayo, which, until a little while before, had been the head village of a terrible Matabele warrior, King Lobengula.

It is now the capital of the great territory of Rhodesia, which, with its 440,000 square miles, nearly equals the area of Germany and Austria-Hungary before the war. After reaching Bulawayo, Rhodes had difficulty in raising money enough to carry on the work, for the cost was enormous, even to a millionaire, as he had then become.

WHERE THE GREAT ZAMBESI RIVER FALLS INTO A YAWNING GULF

But, little by little, the work grew. Here a goldfield was discovered, here a copper-mine, here valuable coal or other minerals were found. The line was thus drawn this way and that, simply to tap districts rich in metals, and so make it pay as soon as possible. This accounts for the strange way in which the railway zigzags on its long course. It was the existence of a valuable coalfield at Wankie that drew it far to the west from Bulawayo. At first it was intended to build only a small branch line here, but ultimately it was decided to make it the main line, and, that determined, there lay ahead the great Zambesi and the Victoria Falls.

There was no turning back; the river had to be spanned. That being so, the line was made to cross, at its narrowest point,

within sight of the falls, the largest in the world. There is one waterfall in British Guiana higher, but not so wide. The Victoria Falls are a mile wide and 400 feet high—higher than the top of St. Paul's Cathedral. We should expect that there would be a great drop in the land below the falls, but that is not the case; the banks of the river are the same height above and below. The river falls into an enormous crevice in the earth, descending with a noise like thunder into a deep but very narrow fissure, throwing up clouds of spray, so that natives, who used to be afraid to approach before Livingstone discovered the falls, named it "The Smoke that Sounds."

A magnificent piece of engineering threw a great bridge across this narrow chasm. First a small electric station was set up at the foot of the falls, the power from the running water supplying energy to drive the plant. Then a wire cable was hauled across the river, and suspended over the gulf. Across this, loads upon loads of material were sent over, ten tons at a time. **HOW A STEAM-ENGINE WAS PACKED UP AND CARRIED ALONG A WIRE**

A steam locomotive was sent across this carrier, a piece at a time. When all was ready a hundred native labourers, under twenty-five English engineers, were set to work, building out the bridge from the two sides of the gorge at once. It was built as regularly as clockwork, the great steel arms growing out from both sides simultaneously. The work was begun in October, 1904, and was finished in nineteen weeks, perhaps the quickest piece of bridge-building on record. As the bridge neared completion there was much excitement, for the least mistake would have been serious, but the two halves met exactly; there had not been a miscalculation of an eighth of an inch. The bridge is the highest in the world, 420 feet above the boiling water below, and is 650 feet in length.

That was not the only exciting piece of work on this part of the line. When the River Kafue came to be crossed there was great difficulty in getting the native workmen to go down in the hollow steel piers which were sunk in the water. It seemed too terrible to them to work under a river, and when they did go down, and a little water leaked into the piers, they fled in a panic of fear. There was no electric cable for this river, but before they got their bridge built the engineers wanted a locomotive on the other side. They ferried it across entire on a gigantic pontoon,

WATCHING THE COMING OF CIVILISATION



THE LAYING OF THE CAPE TO CAIRO RAILWAY THROUGH THE HEART OF A GREAT FOREST

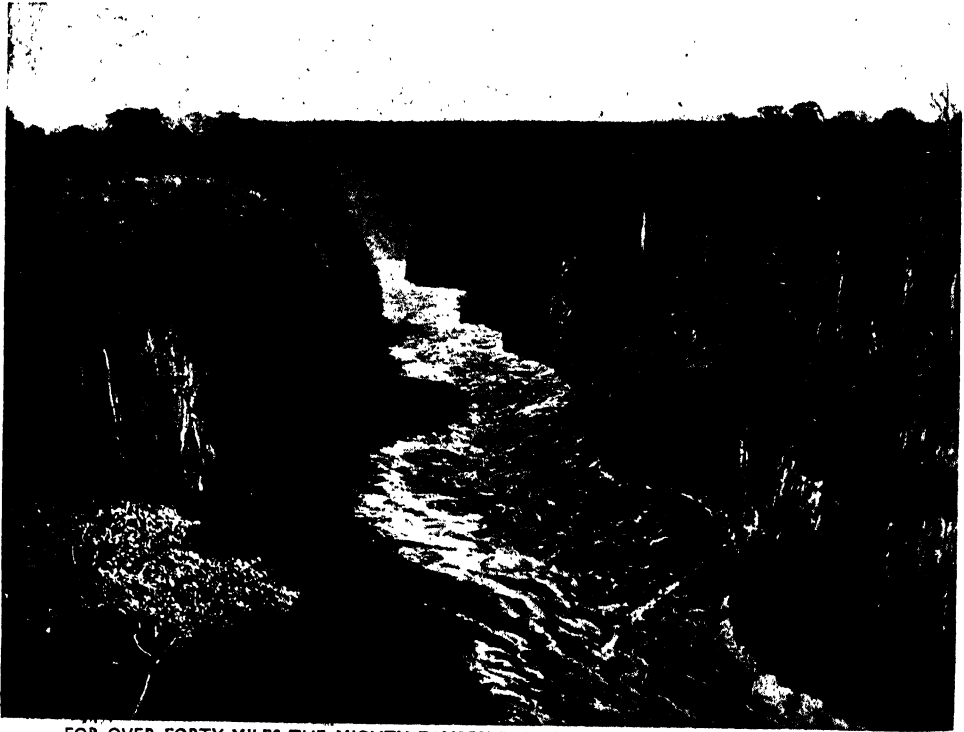


THE WORKERS WHO MAKE THE BED OF THE STEEL HIGHWAY THAT IS PIERCING AFRICA

THE YAWNING GULF ON THE WAY THROUGH AFRICA



THE MARVELLOUS VICTORIA FALLS IN RHODESIA, WHERE THE ZAMBESI LEAPS A CLIFF 400 FEET DEEP



FOR OVER FORTY MILES THE MIGHTY ZAMBESI FLOWS THROUGH THIS YAWNING CHASM

A RIDE THROUGH AFRICA

But worse than water and its bothering ways were the wild animals. Once a great rhinoceros, annoyed at the sight of a little engine puffing about, took it into its head to charge the locomotive. The engine-driver, seeing the animal coming, put on steam and fled, but not soon enough to prevent the rhinoceros from catching the guard's van with its mighty horn and tearing half of the vehicle into splinters. At another place a herd of elephants used nightly to cross the line to go to their drinking place. All went well until one night something disturbed the temper of the leader of the herd, and, with a shrill scream of anger, he

Far worse than this, however, were the experiences of the builders of the Uganda line. The camp of the workers was besieged night after night by man-eating lions. Every night a man, perhaps two men, would be carried off. It was in vain that Englishmen sat up to keep watch; the lions were too cunning to be caught by traps, too wily to go the way by which they seemed to know they were expected. Fires were kept burning, but the lions would leap over them; great defences of thorn bushes were set up, but the lions got through or over them. Every night the camp resounded with dreadful cries as some unhappy victim



LOOKING OUT FROM A TRAIN ON THE CAPE TO CAIRO RAILWAY

charged at the engine and knocked it off the line. But as it fell the engine imprisoned the elephant, holding it down by the foot, so that the lord of the herd had to be shot before the engine could be set right.

Lions, however, were the greatest source of terror. On one occasion a full-grown male, roused from his nap by the whistle of the train, dashed at the engine and tried to claw it. Failing to get a grip, it fell off, but returned to the charge again and again, each time getting out of harm's way as it fell, until at last the driver rushed his engine at the lion and killed it.

was seized and carried from his bed to be eaten in the long grass. At last the natives became so terrified that they refused to go on with the work unless surrounded, day and night, with iron entrenchments. With the British Empire behind them, the builders of the railway were helpless in the presence of two man-eating lions, for there were but two of them at this point. For three weeks not a sleeper was laid, not a rivet was driven; the whole camp was under fear of death from the lions. We can understand something of their horror, for at that camp fifty-five men were killed and eaten

THE BUILDERS WHO WERE THERE BEFORE MAN



THE ENORMOUS ANT-HILLS REMOVED TO MAKE WAY FOR THE RAILWAY AT ELIZABETHVILLE



NATIVES AT WORK REMOVING THE GREAT HEAPS SET UP BY THE "WHITE ANTS"

Many of the pictures illustrating this article are reproduced by the courtesy of the British South Africa Company

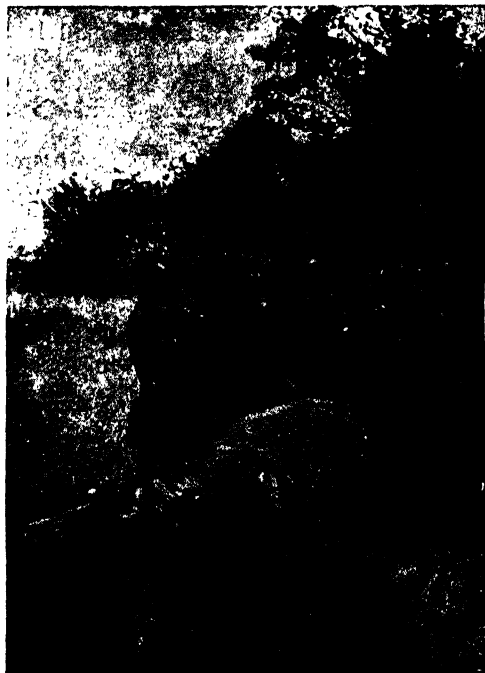
THE WILD LIFE SEEN FROM THE WINDOWS



THE GIRAFFE TAKES HIS LUNCH OFF THE TREES BY THE RAILWAY



THE OSTRICH LOOKS UP WHILE A TRAIN FLIES PAST



A CAPTURE IN THE RIVER

THE CHILDREN'S TREASURE-HOUSE

before a brave Englishman, Colonel Patterson, hid himself high up in a tree, tied up a donkey as a bait, and shot first one and then the other lion. They were huge beasts, but, like all the man-eaters of their tribe, they were old, their teeth had lost their sharpness, and they could no longer catch the swift-running buck or zebra.

THE MYSTERIOUS SHADOW MOVING ACROSS THE LINE BY NIGHT

All went well for a time after this, but when the line had been carried another 120 miles another series of raids took place, and fifteen men were eaten. Three men—two English and one Italian—then detached a little saloon carriage from a train, fixed it in a siding, and determined to watch for the lion at night. They sat in the dark in their saloon, waiting and watching. They noticed that further down the line the fireflies seemed unusually large, and they thought it strange that a rat should keep running across the lines. But the "fireflies" were the eyes of a lion gleaming in the moonlight; the "rat" was his tail dragging across the metals as he strode from side to side! Presently the watchers, tired with their long day's labour, fell asleep, and suddenly there was a great crash, the carriage tilted to one side, and a gigantic lion sprang through the open window. The Italian, who was sleeping on the floor, awoke with a great weight upon his body and hearing heart-rending cries. The lion was standing with its hind legs on his chest while it seized one of the Englishmen from a bed above. It turned, leapt out of the window with the unhappy man in its mouth, and was seen no more.

Mr. D. G. Longworth, the London representative of the Uganda Railway, who was telling these stories to the writer, pointed to a photograph of two lions. "Those are the two that ate the fifty-five men," he said.

THE INFLUENCE OF THE RAILWAY ON THE WILD LIFE OF AFRICA

He was asked if the Italian in the railway carriage survived the shock. "Oh, yes!" said Mr. Longworth. "He was in here yesterday, quite as usual. But," he added, "we don't mind lions out there in the ordinary way. They are only big cats, and unless they are old, and therefore not very active, they will always run away when you meet them. You have nothing to fear from a good lion, only from the old ones. We had a man taken from the little station of Voy a few weeks ago, in broad daylight. He was one of the servants of an Indian prince who was out hunting, and while his master was at lunch the man lay down on

the platform for a rest. As he lay there an old lion crept out from the scrub, and, before anyone could fire a shot, carried the man away and ate him."

It is generally supposed that the coming of the railway leads to the extinction of wild life in a new country, but Mr. Longworth says that this is not so on the Uganda Railway. No one is allowed to kill an animal within a mile of the line, and the result is that the neighbourhood of the railway has become a sort of sanctuary for them. Lions and other animals have increased greatly in numbers. They have learned now that they have nothing to fear from the railway, and they increase in peace.

Uganda is the home of sleeping sickness, which medical men are now studying on the spot, and Mr. Longworth tells an interesting story of the way in which the Uganda Railway Company successfully fights the disease. Sleeping sickness is caused in man by the bite of a mosquito carrying a deadly germ, and this mosquito can only be hatched in water or damp places. What the railway authorities have done is to prevent anybody from living within two miles of the lake—the great Victoria Nyanza—and all around the banks of the lake, where the railway runs, they planted sweet potatoes.

THE FIGHT AGAINST AN ENEMY WHICH DESTROYS THOUSANDS OF LIVES

These kill off the swampy growths which formerly existed, dry up the soil, and make it no longer possible for the death-dealing mosquito to breed there. In such simple ways do clever men check a disease which has slain hundreds of thousands of people within a few years. Of course, the Uganda Railway is not on the route of the Cape to Cairo, but it is a very important feeder of the continental line, and can easily be reached from the Sudan. It is a wonderful piece of work.

We all look to the Cape to Cairo Railway as a great help in the peaceful development of Africa. But war has followed its track. The southern part of the work was interrupted by the Boer War; the northern half was begun for the purpose of war. Before 1882 Egypt had for sixty years been gradually extending her influence over the Sudan, but then for sixteen years a Dervish fanatic, called the Mahdi, and the Khalifa, who had been one of his officers, held the country in a desolating tyranny. They closed the Sudan to civilisation; they massacred, made slaves, blotted out whole communities, and turned the Sudan

A RAILWAY WATCH-TOWER BUILT BY ANTS



AN ANT-HILL USED AS A LOOK-OUT STATION BY THE RAILWAY SURVEYOR

The great white ants of Africa raise huge mounds above their underground galleries, dividing the mound into chambers which communicate with the galleries below. The mounds are built almost entirely of clay, and are very durable. The white ants, or termites, have remarkable burrowing powers, and will bore their way into houses and through the furniture. They have been known in one night to bore their way up through the leg of a table, across the table, stopping to eat what lay on it, and down through another leg into the floor again.

THE CHILDREN'S TREASURE HOUSE

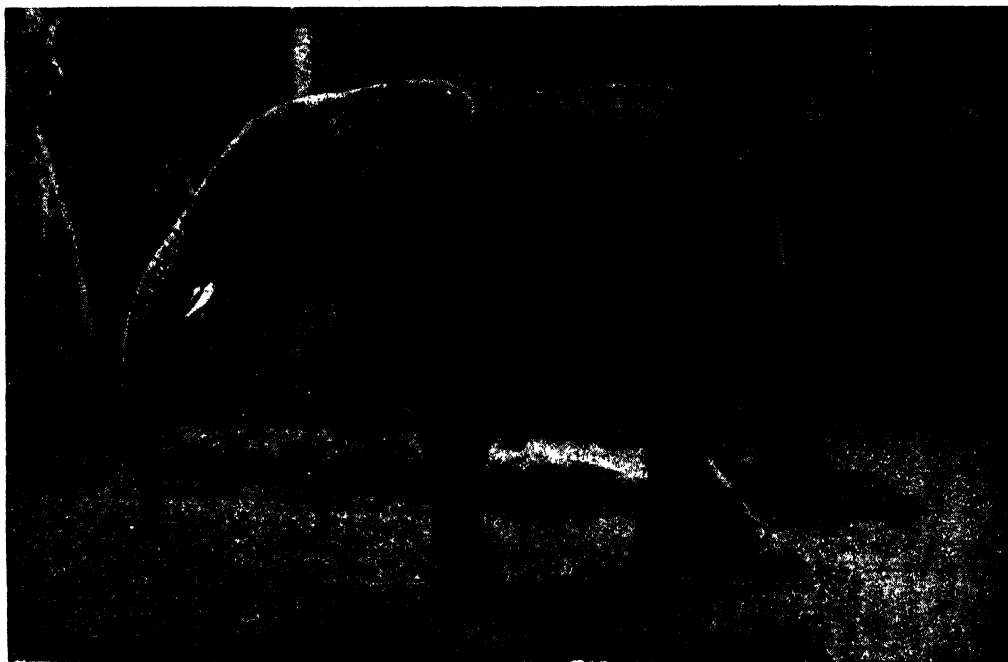
into a wilderness. General Gordon, who had been sent out by the British Government to rescue the native Egyptian garrisons and those dependent upon them, was besieged in Khartoum, and finally slain there. British forces sent to punish the offenders were cut to pieces, and the position of affairs was dreadful until Lord Kitchener appeared upon the scene.

He had to break the power of the Dervishes. His starting point was Cairo, but the Khalifa's stronghold was 1200 miles south, across waterless deserts. All the king's horses and all the king's men could not have reached the enemy, for food and water and stores had to be carried all the way. So Lord Kitchener built a railway, and carried his army along it. He had to fight tremendous battles on the way, so that his men may be said to have worked like the builders of the Temple, with a trowel in one hand and a sword in the other. The railway began at Wady Halfa, and was laid on to Khartoum, and the line constructed as a pathway for an army is now part of the northern link in the chain which is to join Cairo to the Cape.

Such are some of the features and history of this marvellous undertaking. There are thousands of people in Africa who have never seen a cart, whose first journey will be taken by a railway train. Hitherto African travel has been mainly on foot, sometimes in ox-waggon, rarely on horse-

back. Travellers have been carried in hammocks, slung over the shoulders of negroes; they have crossed rivers and lakes in boats which the hippopotamus has delighted to toss into the air; they have tramped on foot for weeks together through forests so dense that the sun cannot penetrate them; they have been carried or have struggled breast-high in swamps; they have made their way almost buried in the towering elephant-grass or among the lacerating scrub and thorn.

But, although Africa is so vast that ages must elapse before railways can be general, the old order is changing, giving place to new. Where trains are, trade will spring up. There are diamonds and gold, coal and precious minerals, tin and copper and platinum, fruits, rubber, oils, nuts, fibres, ivory, hides, furs, and a thousand other things waiting to come from Africa to the markets of the world. The railways will bring them, and the "Dark Continent" will become the centre of a world-wide commerce. It will be free, too, for where the railway goes slavery can never again arise. The railway, like the advance guard of civilisation, comes like the answer to David Livingstone's prayer, ending forever ignorance and slavery, and opening up to light and freedom the homes of unknown millions. Africa, the dark, deep mystery of the past, is one of the mighty hopes of the years to come.



A LORD OF THE DARK CONTINENT—THE AFRICAN ELEPHANT

A SCENE ON THE WONDERFUL ROAD



"GARDEN CITIES" OF EAST AFRICA—A KRAAL, ENCLOSED BY A HEDGE INHABITED BY KAVIRONDO PEOPLE

THE FEARLESS MAN WHO CAME TO HELP US



A TYPE OF THE FIGHTING RULERS OF INDIA WHO CAME TO THE BATTLEFIELDS OF EUROPE



A WORLD NEW AND STRANGE

HOW WOULD YOU LIKE TO GO TO INDIA?

Now, just tell me this : How would you like to go to India ?

It is a question worth thinking about. Think about it during the next fog, or when a good north-easter is howling round the chimney-tops, and the rain driving like parched peas against the rattling windows. Turn it over quietly in your mind. How would you like to go to India, where the sun shines nearly the whole year through, where enormous rivers burn like fire in the midst of rice-fields and jungle, where bullocks pull the carts, buffaloes plough the earth, camels carry the traveller, elephants work like porters in the forest, and 300 millions of the simplest, kindest, and most childlike people under heaven get their scanty living and dream of the life beyond the grave? How would you like. . . .

You need not go to India just now ; but you can keep the thought in your mind and consider whether you would like to go there when you grow up. If you are a boy, you can think whether you would like to go to India as a civil servant, a soldier, a doctor, a lawyer, a missionary, an engineer, a bank clerk, an engine-driver, a tea-planter, a shop-keeper, or a merchant. And if you are so lucky and enviable as to be a girl you can think whether you would like to go to India as a hospital nurse, a mission worker, a lady doctor, or—somebody's wife.

Let me tell you a secret. India is just beginning to wake up. There is

plenty of room there for clever Britons with creative brains and kindly hearts. For centuries India thought of scarcely anything else but the next world ; now she is beginning to think about industry, agriculture, commerce, science, and a great many other sensible and useful activities. India is going to be as wide-awake as Japan, and some of you ought to be there to see that great event and help it to a long day's happiness. So, how would you like. . .

But first of all you must know what India is really like.

Well, to begin with, directly his steamer gets to the Suez Canal the traveller feels that he is in a new world. The sun is much hotter, the light is more dazzling, the air glows and throbs with the intensity of its radiance. It is almost impossible to sleep in a cabin through the Red Sea, and most people lie on deck at night with nothing but a sheet over them. Slowly the air cools as the traveller approaches Bombay, and at first, in the cold dawn of his arrival, he is inclined to think that India is very little different from any other country in the West on a summer's day. It looks flat and colourless ; just a line of broken islands ; a smoky mass of roofs, towers, and factory chimneys ; and all round these islands there is as much noisy and dirty shipping as you see in a London river. But as the sun gets stronger the mist and the smoke disappear, the yellow walls of Bombay shine in the fierce glare, hills are seen on every side,

THE CHILDREN'S TREASURE HOUSE

and the sky turns turquoise, the sea turns royal blue, and the air suddenly flashes like a living soul.

Once in the streets of Bombay—in spite of its electric trams and motor-cars—the traveller feels that now he is, really and truly, in a new world—a world utterly new and utterly strange. It is not only the extraordinarily vivid glare on the walls of houses, not only the suffocating heat which puts him straight away into a Turkish bath even as he sits perfectly still in his gharry—a shabby little Victoria drawn by a shabby little horse—and it is not only the Eastern character of the architecture and the Indian blue of the sky and the queer appearance of banyan-trees, with their roots hanging down from their branches like a girl's brown hair after a swim in the sea; no, it is not only these things which affect the traveller's mind with a sense of strangeness and difference: the real cause is the people.

PEOPLE LIKE NERO, AND DANTE, AND CÆSAR, AND SOME LIKE ENGLISH BOYS

The streets of Bombay are packed and crowded with thousands upon thousands of people, whose complexions, garments, head-gear, as well as their whole manner, suggest a new world. Some are yellow, some are brown, some are black, and some are almost white; some of them wear robes as gorgeous as an emperor's, and some are all but naked; some wear a little twist of cloth on their heads, and some a turban vaster than the hat of the most vulgar woman now in London or Paris; and some are ferocious to look at, some are gentle as lambs, some are like our idea of Old Testament heroes, some are like Brutus, Nero, Julius Cæsar, and Dante, and some are very like English boys conscious of their first stand-up collar and their first walking-stick.

Into whatever Indian city the traveller goes he finds the same thing—crowds of people differing from each other in colour, features, expression, dress, language, habits, and religion: people who are more different than Russians from Spaniards, or Germans from Italians, or Britons from Turks. He is confused by all these millions of different Indians, and cannot discover which are the true representatives of the Indian nation.

He goes into the bazaars, away from the European quarter, and there sees the real life of an Indian city. The word bazaar stands for a native market street, and these market streets of India are the most interesting, perplexing, amusing, and confusing things imaginable.

The streets are very narrow, the gaily painted, sun-blistered houses are seldom more than one or two storeys high, and the ground floor, occupied by the shop, is like a costermonger's little barrow or a stall at a country fair. No window obtrudes between the counter and the people on the pavement, and the merchant either squats in the doorway or sits cross-legged on the counter.

THE NEVER-CEASING MULTITUDES FOR EVER MOVING PAST THE SHOPS

From side to side the street is thronged by a slow-moving procession of humanity; everybody appears to be talking at once; nobody seems to want to buy, and nobody seems to want to sell; it looks as if the whole thing were merely a very elaborate "game of shops," and as if a number of rather big doll's-houses had been ranged side by side for this purpose.

The traveller sees one old bearded merchant, a Mussulman, reading his Koran through a pair of worn spectacles, his lips moving and his finger following the print—reading it there on the counter of his shop, amid piles of brass pots, or carpets, or many-coloured sweetmeats, or rolls of silk. And he sees, among these merchants on their counters or in their doorways, another man praying, and a woman examining her baby's head, and a Hindu merchant having his head shaved, and another puffing contemplatively at his enormous hookah pipe, and another dropping off to sleep with his hands clasped over a vast expanse of girth. And all the time the never-ceasing multitudes of chattering people go slowly by, their splendid garments flashing in the bright sunlight, their many-coloured faces assaulted by a host of flies, and their bright eyes and their white teeth shining like diamonds.

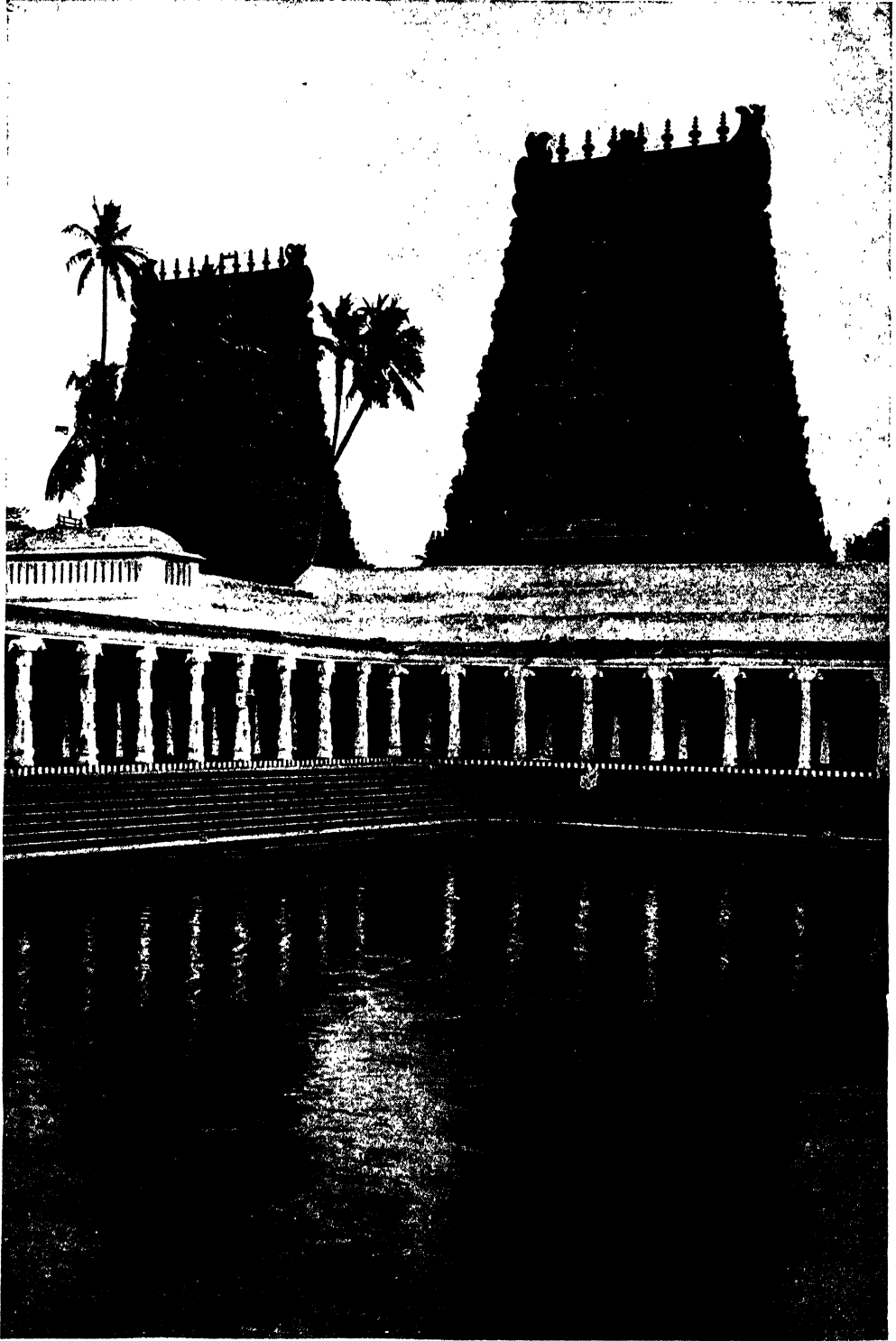
Every now and then, in the midst of these shops, the traveller sees a wondrously ornate building, often gold-coloured and carved extravagantly, with a flight of steps leading to a dim interior.

THE GOLD-COLOURED TEMPLES OF THE PEOPLE WHO WOULD NOT KILL A FLEA

If, as well he might, the traveller takes one of these buildings for a music-hall, a circus, or the habitation of a cinematograph exhibition, and if he attempts to enter, fumbling in his pocket for a rupee, he will be roughly seized and thrown back into the street, where—as likely as not—a miniature revolution will immediately take place.

For these buildings are Hindu temples, where gods and goddesses are worshipped with a ritual like that of the Roman Catholic

A TEMPLE COVERING FIFTEEN ACRES

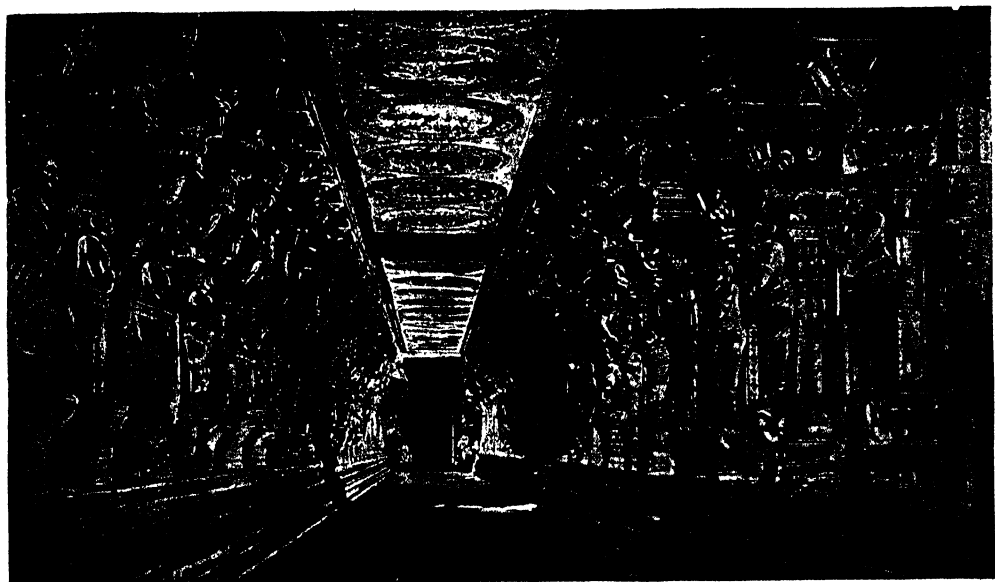


The great temple of Madura, in Madras, is one of the wonders of India. It stands on fifteen acres of ground, and has nine marvellously carved pagodas, like those shown in this picture. The great artificial lake covers 2500 square yards.

THE GLORY MEN HAVE CARVED IN ROCK & STONE



THE WONDERFUL TEMPLE CUT OUT OF ROCK AT ELLORA, IN HYDERABAD



ONE OF THE THREE-QUARTERS OF A MILE OF CORRIDORS IN THE GREAT TEMPLE ON THE ISLAND OF RAMESWARAM, IN SOUTHERN INDIA

IMMENSE ACHIEVEMENTS OF INDIA'S BUILDERS

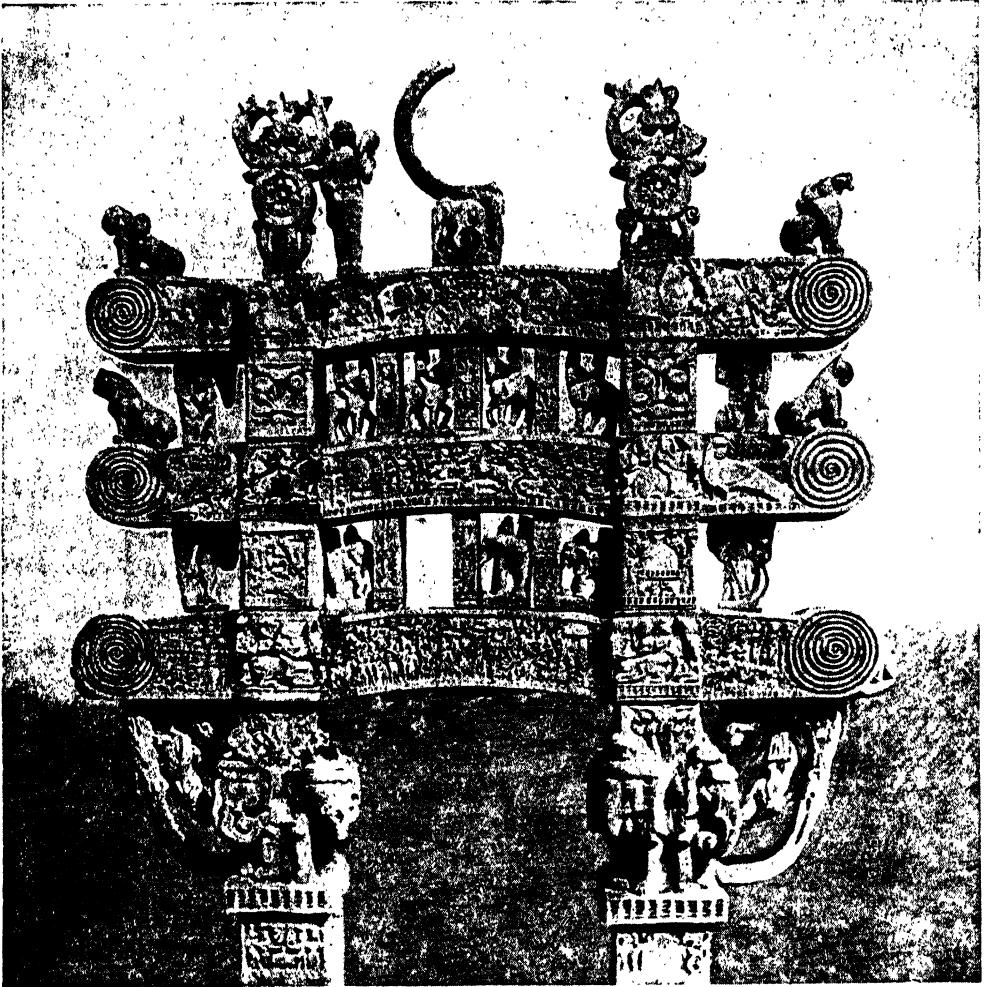


THE IMPOSING ENTRANCE TO THE GREAT BRAHMAN TEMPLE CUT OUT OF THE ROCKS AT ELLORA

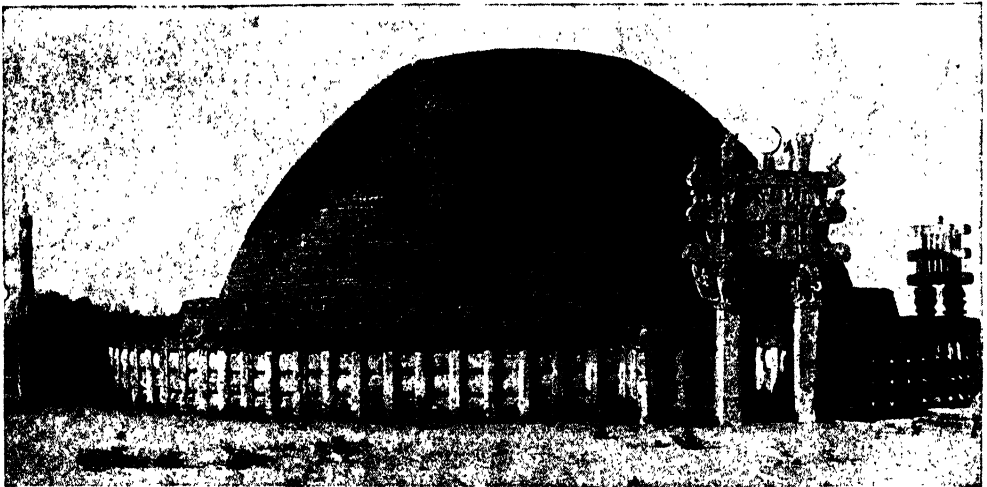


INSIDE THE GREAT KARLI CAVE NEAR MADRAS, PROBABLY TWO THOUSAND YEARS OLD

A GREAT MONUMENT OLDER THAN ROME



ONE OF THE FOUR WONDERFUL GATES TO THE GREAT DOME AT SANCHI



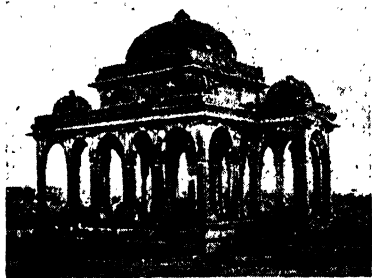
ONE OF INDIA'S GREATEST SIGHTS—THE IMMENSE TOPE, OR BUDDHIST MEMORIAL, AT SANCHI, IN CENTRAL INDIA, BUILT BEFORE THE ROMAN EMPIRE

A MARBLE TEMPLE ON A MOUNTAIN

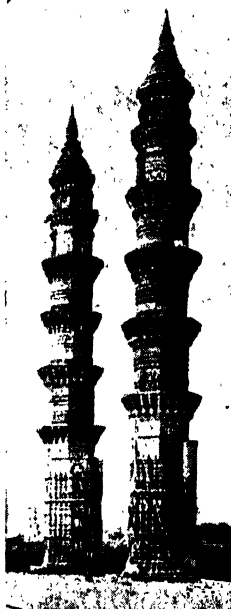


This picture shows the marvellous carving inside one of the marble temples of the Jains on Mount Abu, in Northern India. There are a number of these beautiful temples on the mountain, and the marble was brought from a quarry 300 miles away.

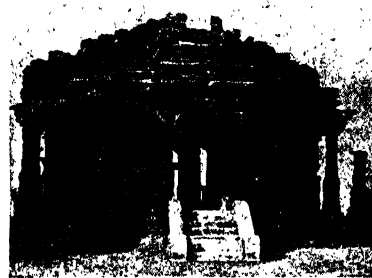
INDIA AND ITS TREASURES OF THE AGES



A NOBLEMAN'S TOMB AT AHMEDABAD



MINARETS 500 YEARS OLD



OUTER PORCH OF A TEMPLE



GROUP FROM A MYSORE TEMPLE



BASE OF A TEMPLE FLAG-STAFF



GATE OF A FORT AT GWALIOR



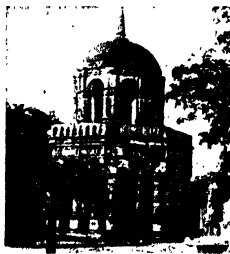
THE PEARL MOSQUE AT AGRA



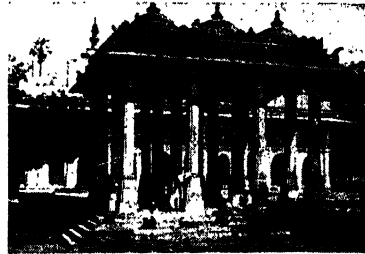
A SULTAN'S TOMB



A NOBLEMAN'S MOSQUE AT AHMEDABAD



DUTCH TOMB AT SURAT



A TOMB 500 YEARS OLD

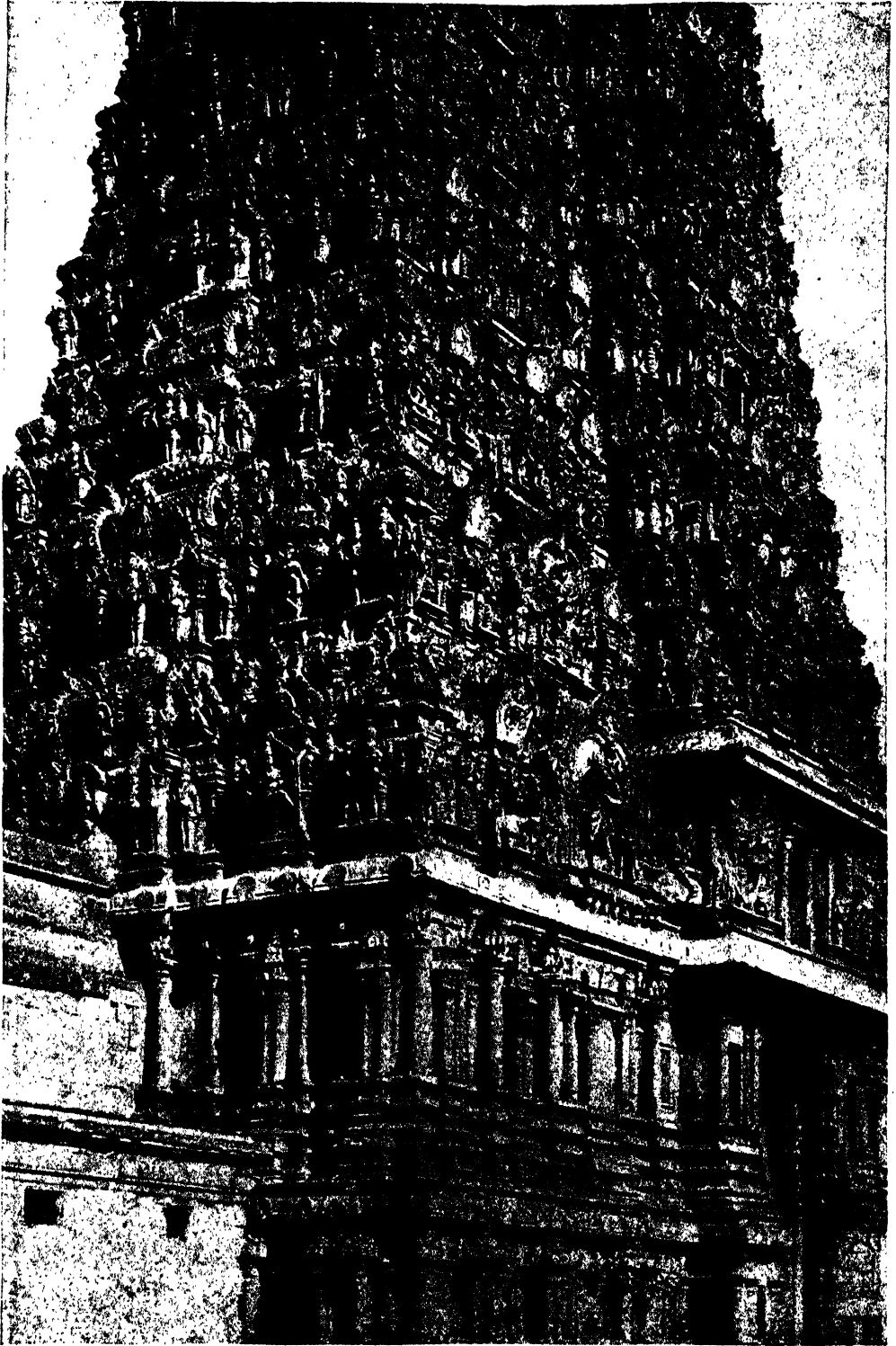


GATE OF THE TAJ MAHAL, AGRA



A KING'S MONUMENT TO HIS FRIEND, AT SIRKHEJ

A DAZZLING PYRAMID OF STATUES

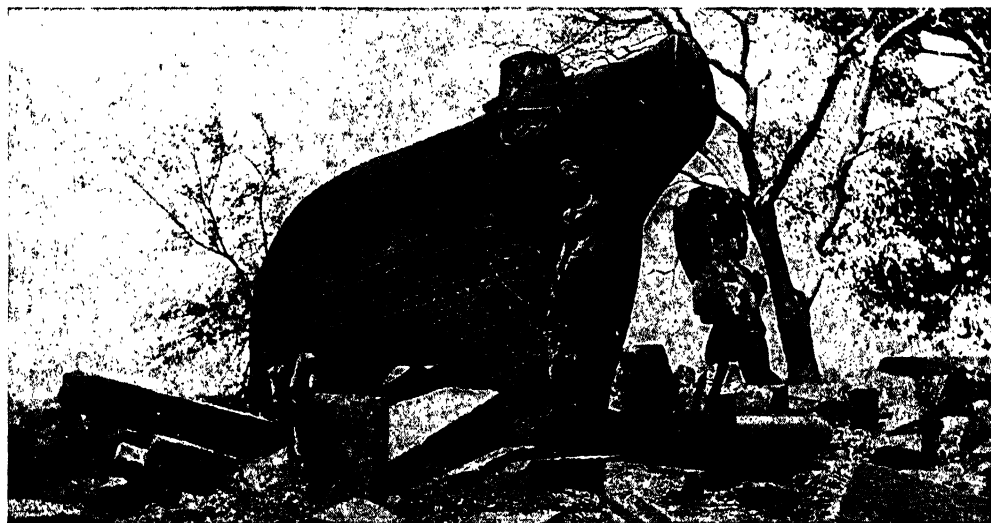


This near view of one of the pagodas in the great temple of Madura shows the elaborate carving on the solid walls of the building. Each group of figures tells some story in the history of the Hindu gods, and the whole is dazzlingly coloured.

MONSTERS THAT GREET A TRAVELLER IN INDIA

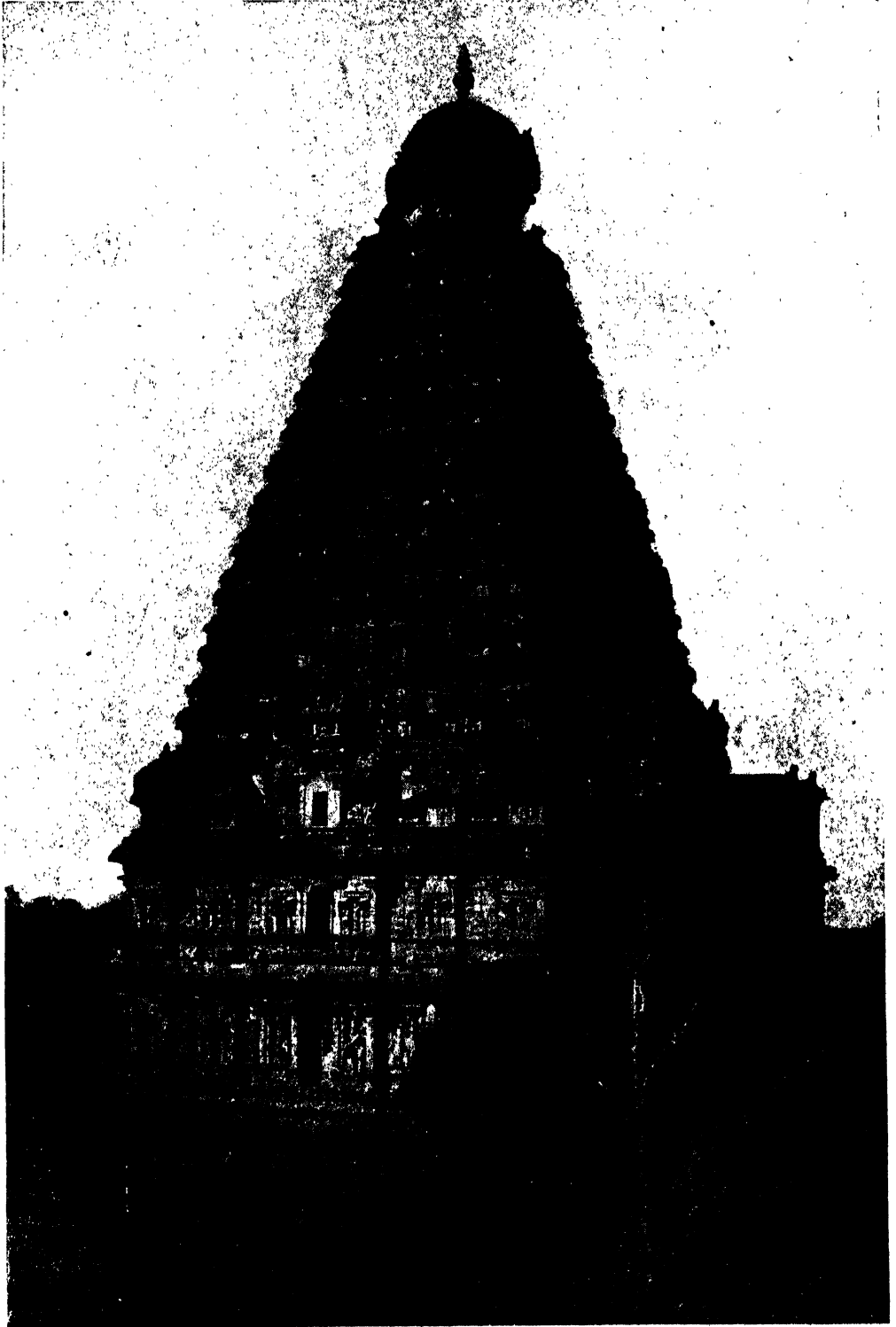


THE LION PROTECTOR OF A GREAT TEMPLE



A COLOSSAL BOAR EMBODYING ONE OF THE GREAT IDEAS OF BUDDHISM

A LOVELY HINDU TEMPLE IN TANJORE



This great pagoda at Tanjore, Madras, is one of the most stately temples in all India. Its beautifully carved walls rise like a pyramid to a height of two hundred feet, and are crowned by a dome which is said to consist of a single huge stone,

DOMES, TURRETS, AND TOWERS OF INDIA



THE ANCIENT GRANDEUR OF THE BEAUTIFUL CITY OF AGRA



THE GLORIOUS PAGODA OF THE TEMPLE AT CONJEEVERAM, ONE OF THE SEVEN SACRED CITIES OF INDIA

A WORLD NEW AND STRANGE

and where no wicked infidel of a Christian is ever permitted to set foot. During a festival the very streets in which these temples stand are closed against Europeans, lest a white man should pollute the sacred atmosphere with his degraded breath, and foul the holy ground with his heinous boot-leather. Some of the temples are more or less pretty in appearance, but nearly every one is marred by some repulsive carving meant to overawe and terrify the worshipper. One of these terrible gods

who are not only vegetarians, but so devoted to all forms of life that they will not even kill the fleas that poison them. They are a dwindling sect, in consequence, a flea-conquered race of humanity, bitten to death without a single scratch in self-defence; but they are immensely rich, and the fronts of their golden temples make a most striking effect in the bazaars.

Then, every here and there, the traveller sees a most imposing building, usually pale blue and white, with a wide flight of stairs



A WONDERFUL BULL CARVED OUT OF THE SOLID ROCK AT CHAMUNDI, NEAR MYSORE.

is portrayed with an elephant's head on his shoulders, another is a frightful monkey, and the goddess Kali is represented with skulls and bones for ornaments; with a severed head in her left hand, a fearful, crimson-dyed sword in her right, and such an expression of murderous ferocity on her distorted face as would give a nervous child nightmare for a month of Sundays.

The finest of these temples belong to the Jains—pronounced Jynes—a sect of Hindus

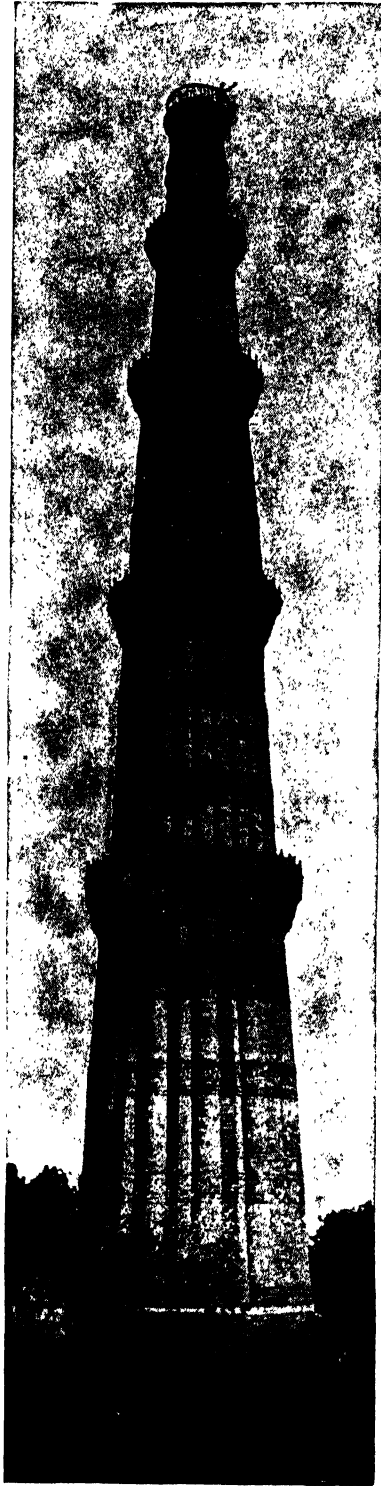
leading to the arched entrance, and with minarets shining against the azure of heaven from the roof. These are mosques, where the Mussulmans, followers of Mohammed, worship Allah, the one true and indivisible God. No statues or pictured windows decorate these mosques, nothing which by any stretch of the imagination could be considered a graven image or a possible cause of idolatry, for the Mussulman is descended from Father Abraham, and is like the Israelite of old, who worshipped

THE CHILDREN'S TREASURE HOUSE

one God, in the midst of innumerable heathens devoted to idols. So it comes about that the traveller can always distinguish between a temple and a mosque even from the outside, for the one is a mass of carved figures and contorted ornamentation, while the other is plain, simple, austere, and sometimes nobly beautiful.

But although the bazaars are the soul of an Indian city they are by no means the soul of India. It is not until the splendid trains of our Indian railways—some of the carriages are fitted with a bath-room—have carried the traveller far away from towns, and not until he has left his wayside station, perhaps in a bullock-cart, and has gone many miles into the open country, that he begins to realise, apprehend, and receive into his own, the real soul of India.

How shall I describe to you this soul of India? It is something shy, timorous, wistful, and appealing. It does not greet you with the rugged strength and boisterous self-confidence of Dover Cliff, or with the passionate sweetness of Italian hills, or with the sunburnt cheerfulness of France. It creeps towards you like a spaniel that fears to be scolded and hopes to be caressed. It is a little guilty and ashamed, as though it had stood for ages and ages with its face to the corner, and only now had received permission to turn round and face the world. You cannot say it is beautiful, but you would be blind of both eyes if you pronounced it dull, ugly, uninteresting. Contemplate slowly and thoughtfully this soul of India, and you will say at



AN INDIAN TOWER 240 FEET HIGH
The Kutab Minar, a memorial of victory near
Delhi. Notice the man at the top,

last that it is the saddest, quietest, gentlest, and most timorous soul in all this world's mysterious geography.

I have been nearly all over India, and never once did I hear Indian children shouting at their play, or see an Indian and his wife walking arm in arm across the fields, or feel one moment's thrill of joy and excitement from all these crowding millions of humanity. And this universal spirit of restraint and self-suppression in the people is the very spirit of India's scenery. The plains are almost level, and sometimes are as brown, parched, and arid as the sands of the desert; the jungle for the most part consists of shrubs, scrub, and undergrowth; the tanks—artificial lakes—are wide and beautiful, but sad beyond words; the rivers, except during the rains, are generally a few trickles of water winding desolately through a vast bed that reminds one of a stone quarry; the hills are low and gentle, covered with trees, and more or less green; the mountains, north and south, are wonderfully majestic, and in some parts more lovely far and even more romantic than the mountains of Europe, but they do not seem to belong to India. The real India lies between these mountains, a low-lying, gently undulating, eternally pensive country—a country where no one is in a hurry, no one is excited about anything, and where even the brightest sunshine is destitute of joy. You see the most gorgeous birds in the world, but you hear no such song as rings through our English woodlands. In little England one

A WORLD NEW AND STRANGE

may go for many miles in the train without seeing a peasant in the fields or a house by the wayside; in vast and enormous India, wheresoever he may go, the traveller is hardly ever out of sight of a village or of peasants toiling on the land. At the edges of every river he sees half-naked men—an army of them—washing clothes. In the fields he sees colonies of men and women

ploughing, sowing, and reaping—for all these occupations occur at the same time, just as in the Indian jungle you may see, all at once, trees in spring, summer, and autumn dress, and some bare for winter. And everywhere he sees wells, to which women are moving through the green rice-fields with brazen vessels balanced on their heads, and at which men are working all day with their bullocks. And round the tanks children wait for the buffaloes to come out from the water to be driven back to the homestead. And in the jungle primitive people may be seen moving among the scrub

with bows and arrows. And along the highway may always be seen caravans of camels, strings of bullock-carts, a procession of elephants, a herd of goats, and little groups of pilgrims carrying their sick or their dead to the sacred river and the burning-ground.

India is full of movement, but sad movement. It is the sorrowful movement of the elephant, not the gay and careless rapture of a colt. Sorrowfully toil the peasants,

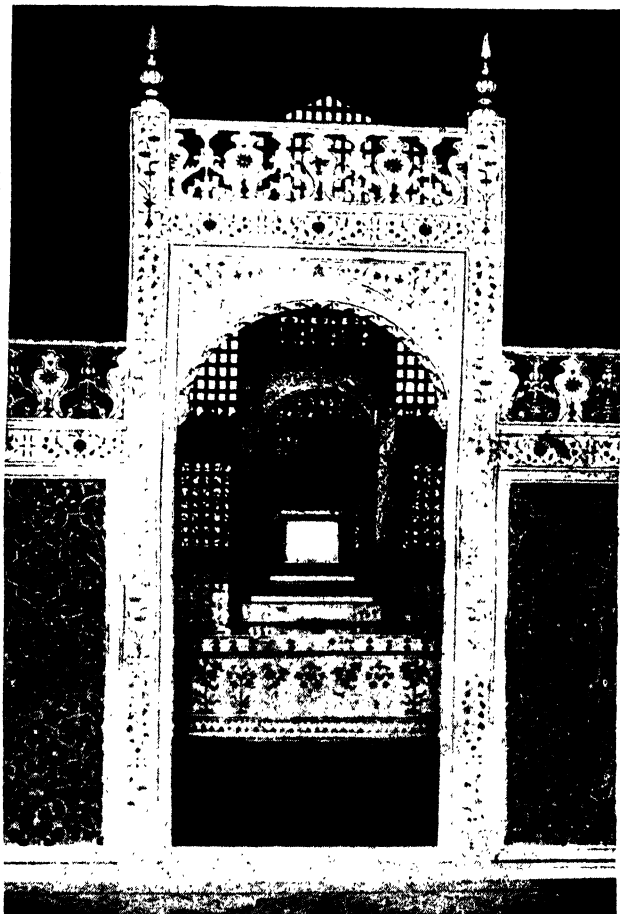
laboriously move the animals, dragglingly creep the children. Only the monkeys seem happy.

But enter one of the villages, make yourself pleasant to the people, and straightway you will discover that these quiet and apparently sad Indians are a most winsome and agreeable folk. You will never meet with a more charming

courtesy. The humblest peasant has the grace of a king, and will receive you with the most ingratiating charm. Forward will come the headman—the mayor of the village—and, salaaming before your honour, will beg you to be seated, will offer you curry and rice on a plantain leaf—you must eat with your fingers—and will offer you a cup of water. He will tell you, if you understand his language, that his bosom swells with pride because you, a great sahib, have come such a long way to see his humble village. And then he will ask questions: Are you one of a large family? Have you much

money? What is the price of rice in your part of the world? And something about the Emperor. If you admire his baby, and it happens to be a girl, he will beg you to accept it as a present.

The houses are built of mud walls, with roofs formed of interlaced palm leaves. Most of them have a verandah, where the men sleep; the interior, with no furniture, is shared by the women, children, poultry, cattle, and very often a parrot. A Hindu



A BEAUTIFUL GATEWAY IN THE TAJ MAHAL

The Taj Mahal, one of the most magnificent buildings in all India, was built in the seventeenth century by the Emperor Shah Jehan as a tomb for himself and his favourite wife. The building occupied twenty thousand men twenty-two years.

THE CHILDREN'S TREASURE HOUSE

believes that his god becomes annoyed if he is not perpetually praised, and so a parrot is trained to say the god's name and a word or two of adoration; the Hindu takes it easy while the bird utters this monotonous chant from morning to night.

In most villages there is either a temple or a shrine, for to the Hindus religion is the central business of life. Sometimes they daub a tree or a rock with red paint, and worship that. Just outside many of the villages you will see most curiously shaped camels, horses, or elephants, made of mud and clay and painted in fantastic colours; these animals are provided by the villagers for their gods and goddesses, in case the divinities should wish to take a ride. In villages, or quarters of towns and cities, where those people live who are called helots, pariahs, or outcasts—that is to say, the lowest people in India, and there are some 70,000,000 of them—the temple is a very humble mud hovel, and the priests are called "black priests," and a real Brahman priest would rather die than speak to one of these black brothers.

THE DOCTOR WHO WOULD LET SEVENTY MILLION PEOPLE PERISH

A caste postman will not give letters into the hands of these outcasts; he flings them down contemptuously at the head of the village street. A caste doctor will not go to them when they are sick; the whole seventy millions might perish before he would go. A Brahman priest will not go to them when they are dying. Until England went to India these poor pariahs were the most wretched and despised people under heaven. But now, slowly and surely, Christianity is converting them into a bold and intelligent democracy.

Many temples of great splendour—in a certain sense of the word—are scattered throughout India. Some of them are set on the tops of hills, like our castles in Europe, and look very grand and impressive, flashing all their carving and colouring in the blaze of the sun. The greatest of these temples have entrance gateways in the fashion of Chinese pagodas, painted, as a rule, red and yellow, and they are carved with hideous and repulsive faces.

The famous and holy city of Benares is crammed with extraordinary temples. In one you see a white bull feeding on rose petals from a huge golden dish, the pilgrims kneeling on the dirty floor—which is like a foul stable—in worship and adoration. In another temple you fancy yourself in the monkey-house of the Zoological Gardens,

for it is alive with sacred monkeys chasing the pilgrims for food. To the Mussulman all this is disgusting, revolting, and blasphemous; but the Mussulmans are 70,000,000, and the Hindus are 230,000,000. In spite of this great disparity in numbers, however, the Mussulmans would make holy war against the Hindus but for the Pax Britannica—or "British Peace"—as we call the peace maintained by the British Government.

PERHAPS THE MOST PERFECT BUILDING ON THE EARTH

It is in the old cities of India that you see the most glorious buildings and the most beautiful architecture. In Agra, for instance, you breathe the very air of the great Mogul Empire, and the mosques of Islam there and in Delhi surpass in the sweet dignity of their refined beauty anything that we possess in Europe. The marble floors, walls, and roofs are cut to represent flowers, and inlaid with precious stones. Some of the panels are carved and pierced so that they look like fretwork. In the palace of Shah Jehan at Agra there is one of these beautiful panels so cunningly carved that while people inside can look through and see everything, the person on the other side can see nothing at all of the interior. The Taj Mahal at Agra, standing in a cypress garden on the banks of the Jumna, is perhaps the most perfect building on this earth; it is the tomb built by Shah Jehan for his faithful wife, and there he and she now lie in tombs of marble, very beautifully asleep.

Often, surely, the Mussulmans who visit these exquisite and superb creations of their dead emperors must look with questioning eyes and rebellious hearts at the hideous red-brick barns which we erect to God, and which, sometimes, we fill with statues and images and symbols, which the Mussulman regards as the abomination of idolatry.

THE SPLENDID WORK THAT ENGLAND IS DOING FOR INDIA

But England is doing something more than setting up these ugly churches. She is turning the rivers here and there, so that waste deserts, where no man ever lived before, now hold a million families who thrive exceedingly. She is also setting up immense factories, laying railway lines in every direction, building hospitals and schools, delving deep into the earth for coal and silver, improving agriculture, keeping the peace, withstanding the tyrant, and commanding equal justice for rich and poor.

This is the work that all who love liberty will urge forward with all their influence,

HOW ENGINEERS ARE TRANSFORMING INDIA



ONE OF THE GREAT FALLS ON THE UPPER GANGES CANAL, WHICH REACHES, WITH ITS CHANNELS, NEARLY 10,000 MILES, AND IRRIGATES AN AREA OF ONE AND THREE-QUARTER MILLION ACRES.



LINKING UP THE WATERWAYS OF INDIA TO IRRIGATE IMMENSE AREAS OF LAND IN TIMES OF DROUGHT

THE CHILDREN'S TREASURE HOUSE

so that the future of this great country will be more and more prosperous.

So perhaps it is only a few dreamers who look back with regret on the days of the Great Moguls, days of hideous tyranny and incessant war, days of fiendish cruelty, assassination, murder, torture, and brutality.

Children are now taught to read and write, the lowest outcast can enter a Government hospital, and the meanest peasant can claim justice from the proudest Brahman.

cricket, polo, and tennis. At almost every railway station there is a good refreshment-room, and a large waiting-room fitted with lounges and armchairs, where a traveller may pass the night and take a bath in the morning free of charge. And though things are rather dearer than they used to be, a man may still live luxuriously in India on money that would render life hard and troublesome in England. The peasant keeps a family on twopence a day ; the factory hand is rich with



THE WONDERFUL STONE PILLARS ROUND A BEAUTIFUL HINDU TEMPLE

And India is waking up. Quietly and without excitement she is putting back the blankets of custom, raising her head from the pillow of superstition, and looking with slowly opening eyes towards the new sun of freedom and enterprise. The traveller finds nearly all the comforts of Europe in the new cities: The hotels have lifts, electric lights, bath-rooms, and French cooks. There is a proper water-supply and system of drainage. Indians have their clubs, and play

fivepence a day ; and the schoolmaster is a Cræsus with sixteen shillings a month.

Beautiful, if wistful and sad, is this great empire of India ; and though it takes most Englishmen a little time to accustom themselves to the burning sun and incessant glare, it is a country where our people live noble lives and are so happy that many of them settle there even when they have pensions enough to come home.

HAROLD BEGBIE

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